General Information

Lesson Parts & Duration

Total Duration: 2 to 2 ½ hours

- Segment 1: Reading for Comprehension: Key Details (45-60 Minutes)
- Segment 2: Reading for Comprehension: Sequencing (45-60 Minutes)
- Segment 3: Phonics: Multiple Meaning Words and Homophones (30-45 Minutes)

Subject(s)

- Informational Text: Growth Cycle of Pumpkins, by Janna Duffy; Key Ideas and Details (R.I.2.1-3)
- Writing: (W2.2); Word Analysis (RF 2.3)

Objective

- Students will answer questions such as what, where, when, and how to demonstrate understanding of key details in the text.
- Students will develop a graphic organizer that will record key information about the text.
- Students will develop a graphic organizer to sequence the stages of the Growth Cycle of Pumpkins.
- Students will identify multiple meaning words and select the correct meaning based on a text.

Materials

- **Required:** copies of the story, Growth Cycle of Pumpkins (1 copy per student) (pages 15-18)
- blank white paper, 8 ½ x 10
- lined paper, wide ruled (2 pieces or more per student)
- pencils and crayons for students
- chart paper (**Prep:** On the chart paper, vertical position, draw the graphic organizer on page 2)
- dry erase board, chalkboard, document camera or similar device to share with class
- **Optional:** color copies of the "Multiple Meaning Words" & "Homophone" sheets (pages 20-22) (1 copy for teacher display)
- **Optional:** printable "Break Up Your Day" brain/movement break ideas (page 24)

Protocols (page 23)

- Used throughout lesson - be familiar with each protocol.
- Place Protocols under a document camera (if available) as necessary throughout the lesson.

Throughout these lessons, you will find:

- ***Scripted Text*** indicates things that need to be said directly. Bullets starting with a **"T"** followed by *italicized type* indicate scripted text
- **Clarifiers** within scripted text are in orange
- **Teacher Directions** indicate things you should be doing
- **Side notes** provide helpful hints, ELL strategies, differentiation and information
- **Break Up Your Day** (Brain/Movement Breaks) are in green boxes (at the end)

Remember!

Quality over quantity. All components do not have to be accomplished; lessons may be ended at any time and resumed later.

©2017

It is illegal to copy without express permission.

Instructional Plan: Segment 1: 45-60 minutes

Subject

- Reading for Comprehension-Key Details

Objective

- Students will answer questions such as what, where, when, and how to demonstrate understanding of key details in the text.
- Students will develop a graphic organizer that will record key information about the text.
- Students will develop a graphic organizer to sequence the stages of the Growth Cycle of Pumpkins.

Materials

- **Required:** copies of the story, Growth Cycle of Pumpkins (1 copy per student) (pages 15-18)
- chart paper (**Prep:** On the chart paper, vertical position, draw the graphic organizer on page 2)
- dry erase board, chalkboard, document camera or similar device to share with class

Distribute the text, Growth Cycle of Pumpkins to the students. 1 copy per student

T *Once you have your text, please write your name in the top right corner.* Model this for students to have an example.

Introduction

T *Students, you are going to listen and read along to this story today as I read it aloud to you.*

T *In looking at the first page, what kind of clues to the meaning of this story do you find that prepare us to read this text?* Using equity sticks, if available, choose students to answer. Answer: illustration, title

T *Okay, let's listen to the story now.*

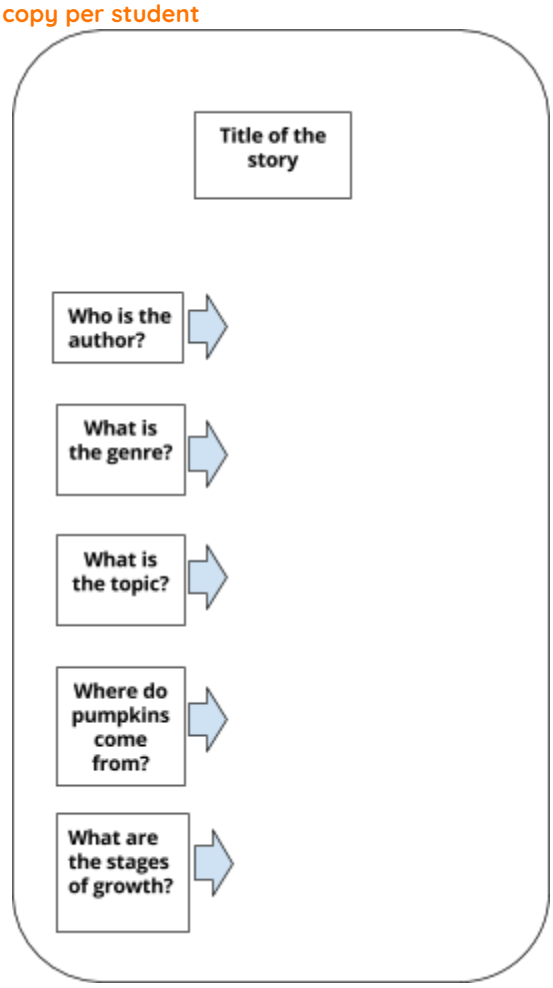
Read aloud the complete story as students listen silently.

T *We are going to use this graphic organizer to help us to organize the key information from our story.* Draw students attention to the graphic organizer you have already made. If you didn't have a chance to prep this chart in advance, simply create it as you go!

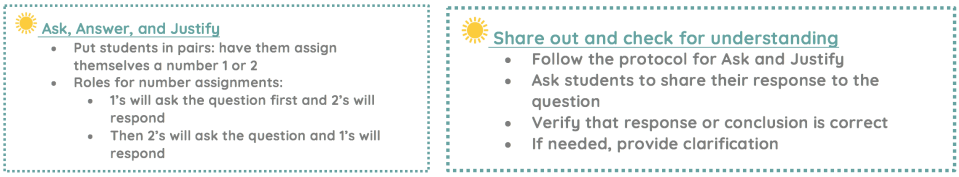
T *For each part of our chart we are going to first discuss with a partner and then share our ideas with the class.*

T *I will then be writing all of our answers on the chart as we go.*

Put students in partners. Someone sitting near them or mix all of the students up.



It is illegal to copy without express permission.



T *We are going to use the Ask, Answer and Justify protocol with our partners.*
T *With your partner, please decide who is going to be a 1 and who is going to be a 2.*
T *1's will ask the questions first and then 2's will respond or answer the question.*
T *Then the 2's will ask the next question and 1's will respond.*
T *Next time you will switch and 2's will go first asking the question.*
T *Your first question is: "Who is providing the information in this story?"*

Ask, Answer and Justify

Partner Discussion

Question: Who is providing the information for this story?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: the author; Janna Duffy

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Now you will switch and 2's will go first asking the question.*
T *Your next question is: "What is the genre of this story?"*
T *Genre means what type or kind of story it is, for example is it a made-up story, which we call fiction?*
T *Or is it a real informational story, which we call nonfiction?*

Ask, Answer and Justify

Partner Discussion

Question: What is the genre of this story?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: Nonfiction or Informational

Verify that responses are correct, provide clarification if needed and record responses on chart.

It is illegal to copy without express permission.

T *Now you will switch and 1's will go first asking the question.*
T *Your next question is: "What is the topic of this story?"*
T *A topic is like a subject, what is it mostly talking about?*

Ask, Answer and Justify

Partner Discussion

Question: What is the topic of this story?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: Pumpkins; Growth Cycle of Pumpkins

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Now you will switch and 2's will go first asking the question.*
T *Your next question is: "Where do Pumpkins come from?"*

Ask, Answer and Justify

Partner Discussion

Question: Where do Pumpkins come from?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: Pumpkins come from seeds.

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Now you will switch and 1's will go first asking the question.*
T *Your last question is: "What are the stages of growth?"*

Ask, Answer and Justify

Partner Discussion

Question: What are the stages of growth?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

It is illegal to copy without express permission.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: Stage 1: Pumpkin Seed; Stage 2: Pumpkin Sprout; Stage 3: Pumpkin Stems & Vines; Stage 4: Pumpkin Blossom; Stage 5: Green Pumpkin; Stage 6: Pumpkin Turns Orange

Verify that responses are correct, provide clarification if needed and record responses on chart.

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.

See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 24)

 ©2017

It is illegal to copy without express permission.

Instructional Plan: Segment 2: 45-60 minutes

Subject

- Reading for Comprehension: Sequencing

Objective

- Students will develop a graphic organizer that will record key information about the text.
- Students will develop a graphic organizer to sequence the stages of the "Growth Cycle of the Pumpkin".

Materials

- **Required:** copies of the story, Growth Cycle of Pumpkins (1 copy per student) (pages 15-18)
- blank white paper, 8 ½ x 10
- pencils and crayons for students
- chart paper, dry erase board, chalkboard, document camera or similar device to share with class
- **Optional:** printable "Exit Slip" (page 19)

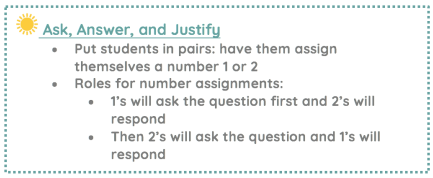
Make sure that students have their copy of Growth Cycle of Pumpkins from Segment 1.

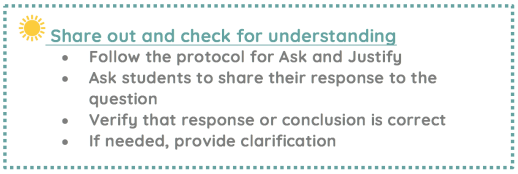
Introduction

T *Students, you are going to listen and read along as I reread to you, Growth Cycle of Pumpkins.*
T *Okay, let's listen to the story now.*
T *Remember to follow along as I read to you.*

Read aloud the complete story as students listen silently.

Put students in partners. Someone sitting near them or mix all of the students up.





T *We are going to use the Ask, Answer and Justify protocol with our partners.*
T *With your partner, please decide who is going to be a 1 and who is going to be the 2.*
T *1's will ask the questions first and then 2's will respond or answer the question.*
T *Then the 2's will ask the next question and 1's will respond.*
T *Next time you will switch and 2's will go first asking the question.*
T *For each question, you will first take a moment and find your answer in the text.*
T *Then you will Ask, Answer and Justify with your partner.*
T *Last, we will share our answers with the class.*
T *Your first question is: "What part of the plant does the pumpkin grow from?"*
T *Take a moment and find your answer in the text and underline it.*

Give time to complete this task. Monitor students and provide assistance as needed.

T *Now, turn to your buddy and share what you underlined, making sure to justify your thinking by explaining your answer.*

Ask, Answer and Justify

©2017

It is illegal to copy without express permission.

Partner Discussion

Question: What part of the plant does the pumpkin grow from?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: The pumpkin grows from the vines.

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Your second question is: "How big can a pumpkin plant grow?"*
T *Take a moment and find your answer in the text and underline it.*

Give time to complete this task. Monitor students and provide assistance as needed.

T *Now, turn to your buddy and share what you underlined, making sure to justify your thinking by explaining your answer.*

Ask, Answer and Justify

Partner Discussion

Question: How big can a pumpkin plant grow?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: A pumpkin can grow ten feet or more.

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Your third question is: "What is another word for pumpkin?"*
T *Take a moment and find your answer in the text and underline it.*

Give time to complete this task. Monitor students and provide assistance as needed.

T *Now, turn to your buddy and share what you underlined, making sure to justify your thinking by explaining your answer.*

Ask, Answer and Justify

©2017

It is illegal to copy without express permission.

Partner Discussion

Question: What is another word for pumpkin?

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

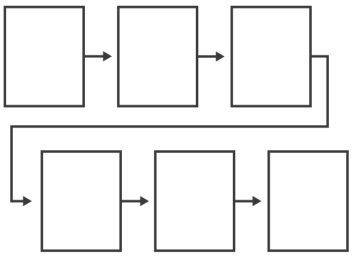
T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: Another word for a pumpkin is a gourd.

Verify that responses are correct, provide clarification if needed and record responses on chart.

Pass out one piece of plain white 8 ½ x 10 paper to each student, remind them to write their name and date at the top of the page.

Draw this graphic organizer on the board or chart paper:

Sequencing Design



Sequence of Events

T *Now let's try to recall the sequence of events from the story.*
T *I would like you create your own graphic organizer to look like mine.*

Give time to complete this task. Monitor students and provide assistance as needed.

T *In our first box, write the following sentence at the bottom of the box, "The growth cycle of a pumpkin begins with the ____ stage."* Write this sentence from on the board for students to copy.
T *We are going to use a sequence word in each of our sentences to show an order of events.*
T *Some examples of common sequence words are first, next, then, and last.*
T *However, sometimes we also use first, second, third, and so on when we are trying to show the stages of something or the order.*
T *For our Cycle of a Pumpkin sequence let's use first, second, third…*
T *In our second box we will write, "The second stage of a pumpkin is_____."*
T *Who thinks they know what I would write in my third box?* **Using equity sticks, if available, choose students to answer.** Answer: The third stage of a pumpkin is _____.
T *Great, I would like you to continue in each of the boxes to tell the fourth, fifth, and sixth stages.*
T *Remember to continue using our same sentence frame and filling in each stage.*
T *Once you have finished with all six of your sentences you may draw pictures to show each stage and color your illustrations with your crayons.*

Give time to complete this task. Monitor students and provide assistance as needed.

Collect these papers once students are finished and leave them for the teacher.

***You may use the exit slip at the end of this lesson as a quick assessment of student understanding. Either print them out (page 19), or simply have students copy the problems on a half sheet of paper.**

It is illegal to copy without express permission.

Name: ANSWER KEY Date: _____

Exit Slip: Segment 2

Sequencing: Growth Cycle of Pumpkins

1. The first stage is the pumpkin seed.
2. The second stage is the pumpkin sprout.
3. The third stage is the pumpkin stems and vines.
4. The fourth stage is the pumpkin blossoms.
5. The fifth stage is the green pumpkin.
6. The sixth stage is the orange pumpkin.

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.

See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 24)

 ©2017

It is illegal to copy without express permission.

Instructional Plan: Segment 3: 30-45 minutes

Subject

- Phonics: Multiple Meaning Words and Homophones

Objective

- Students will identify multiple meaning words and select the correct meaning based on a text.

Materials

- **Required:** copies of the story, Growth Cycle of Pumpkins (1 copy per student) (pages 15-18)
- lined paper or printed exit slip
- pencil & crayons/colored pencils
- document camera or whiteboard
- **Optional:** color copies of the "Multiple Meaning Words" & "Homophone" sheets (pages 20-22) (1 copy for teacher display)
- **Optional:** printable "Exit Slip" (page 19)

Introduction

T *Today we will be learning about multiple meaning words.*
T *Multiple meaning tells us that they have more than one meaning.*
T *We are going to examine some words from the story Growth Cycle of Pumpkins.*

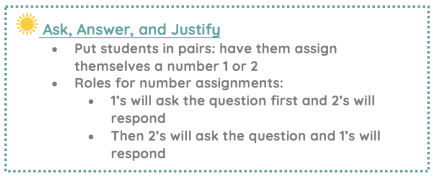
Write "PLANT" AND "PICK" on the board or display them on a document camera.

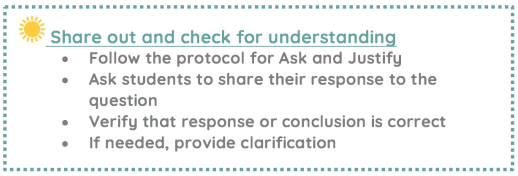
T *Both of these words, "plant" and "pick" are in our story.*
T *Let's look at "plant" first.*
T *Let's find it in our story, look through your story and raise your hand if you can find the word "plant".*

Give time to complete this task. Monitor students and provide assistance as needed.

T *Who can tell me what page they found the word plant on?* **Using equity sticks, if available, choose students to answer.** Answer: page 1 & 2
T *I am going to read the sentences that contain the word "plant" or "plants".*
T *Follow along with me on page 1 &2.*
T *"First, you take a pumpkin seed and plant it into rich, dark soil. Make sure you give it plenty of room! Some pumpkin plants can grow ten feet or more."*
T *"This is the exciting part because the vines grow across the soil, across sidewalks, even into other plants."*

Put students in partners. Someone sitting near them or mix all of the students up.



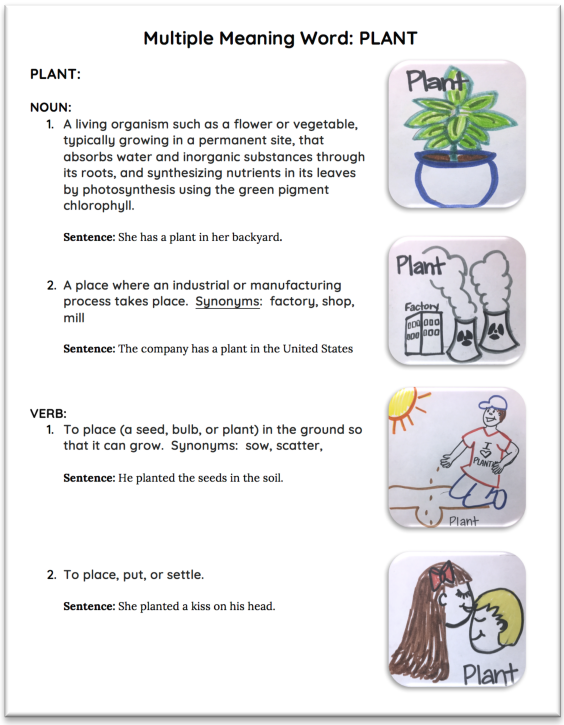


T *We are going to use the Ask, Answer and Justify protocol with our partners.*
T *With your partner, please decide who is going to be a 1 and who is going to be a 2.*
T *1's will ask the questions first and then 2's will respond or answer the question.*
T *Then the 2's will ask the next question and 1's will respond.*
T *Next time you will switch and 2's will go first asking the question.*
T *For each question, you will first take a moment and find your answer in the text.*
T *Then you will Ask, Answer and Justify with your partner.*

It is illegal to copy without express permission.

T *Last, we will share our answers with the class.*
T *I am going to show you a chart that has several meanings for the word plant.*

Project chart on page 20 so students can see.



T *Here we can see that there are four meanings for the word plant.*
T *I am going to read them each to you.*
T *Two of our meanings are nouns and two of our meanings are verbs.*
T *Does anyone know the difference between a noun and a verb?*
T *Who can tell me what one of these 2 words mean?* **Using equity sticks, if available, choose students to answer.** Answer: noun: person, place, or thing & verb: action or something you can do
T *Our first meaning for plant is a noun.*
T ***The definition is:*** *A living organism such as a flower or vegetable, typically growing in a permanent site, that absorbs water and inorganic substances through its roots, and synthesizing nutrients in its leaves by photosynthesis using the green pigment chlorophyll.*
T *The second meaning is also a noun.*
T ***The definition is:*** *A place where an industrial or manufacturing process takes place. Synonyms: factory, shop, mill.*
T *The third definition is a verb.*
T ***The definition is:*** *To place (a seed, bulb, or plant) in the ground so that it can grow. Synonyms: sow, scatter*
T *And our fourth and final definition is a verb too.*
T ***The definition is:*** *To place, put, or settle.*
T *Now with your partner, 1's I would like you to ask 2's which of these definitions fit our story.*
T *Make sure that they justify and explain their answer.*
T *Then 2's I want you to ask the 1's which definition they think fits our story.*
T *Make sure that they justify and explain their answer.*
T *Then together see if you can agree on one definition.*

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: The first definition of a living organism matches because our story is about pumpkins and pumpkins are living things.

Verify that responses are correct, provide clarification if needed and record responses on chart.

T *Now let's look at the word "pick".*
T *Let's find it in our story, look through your story and raise your hand if you can find the word "pick".*

Give time to complete this task. Monitor students and provide assistance as needed.

It is illegal to copy without express permission.

- **T** *Who can tell me what page they found the word pick on?* **Using equity sticks, if available, choose students to answer. Answer: page 3 & 4**
- **T** *I am going to read the sentences that contain the word "pick"*
- **T** *Follow along with me on page 1 &2.*
- **T** *"It grows and grows and grows until it is almost ripe and ready to pick."*
- **T** *"It is ready to pick and take back indoors!"*

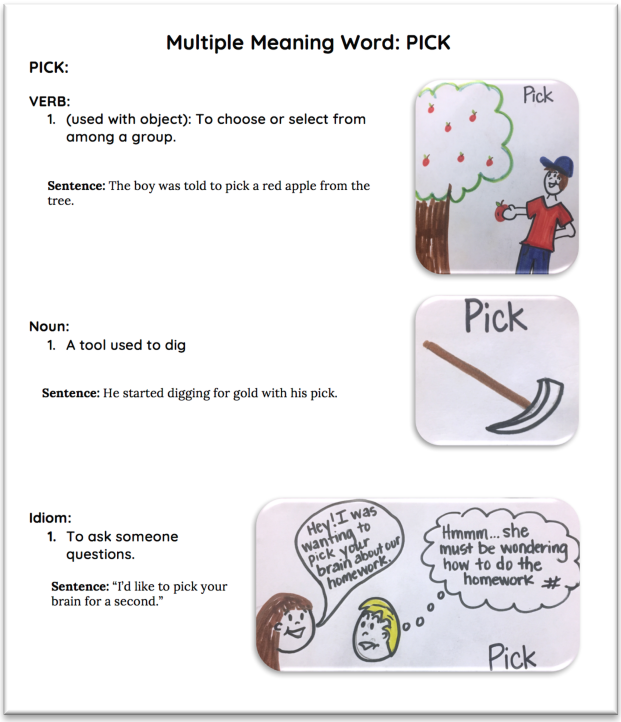
Put students in partners. Someone sitting near them or mix all of the students up.

Ask, Answer, and Justify
- Put students in pairs: have them assign themselves a number 1 or 2
- Roles for number assignments:
  - 1's will ask the question first and 2's will respond
  - Then 2's will ask the question and 1's will respond

Share out and check for understanding
- Follow the protocol for Ask and Justify
- Ask students to share their response to the question
- Verify that response or conclusion is correct
- If needed, provide clarification

- **T** *We are going to use the Ask, Answer and Justify protocol again with our partners.*
- **T** *Then, we will share our answers with the class.*
- **T** *I am going to show you a chart that has several meanings for the word pick.*

Project chart on page 21 so students can see.



- **T** *Here we can see that there are three meanings for the word pick.*
- **T** *I am going to read them each to you.*
- **T** *One meaning this time is a verb, one is a noun, and the last is what we call an "idiom".*
- **T** *An idiom is like an expression, it isn't taken literally.*
- **T** *Like "it's raining cats and dogs".*
- **T** *That idiom does not mean that cats and dogs are actually falling from the sky.*
- **T** *Instead it is just used to say imply it is raining really hard.*
- **T** *Our first meaning for pick is a verb.*
- **T** ***The definition is:*** to choose or select from among a group: to pick an apple from the tree.
- **T** *The second meaning is also a noun.*
- **T** ***The definition is:*** *A tool used to dig: He started digging for gold with his pick.*
- **T** *The third is an idiom.*
- **T** ***The idiom is:*** *"I'd like to pick your brain for a second."*
- **T** *Now with your partner, 2's I would like you to ask 1's which of these definitions fit our story.*
- **T** *Make sure that they justify and explain their answer.*
- **T** *Then 1's I want you to ask the 2's which definition they think fits our story.*
- **T** *Make sure that they justify and explain their answer.*
- **T** *Then together see if you can agree on one definition.*

Provide time for students to discuss this question. Monitor to ensure that 2's are asking 1's and 1's are answering and then they switch and 1's ask 2's and 2's answer.

Share out and check for understanding

It is illegal to copy without express permission.

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: The first definition of chose or select from among a group because when the pumpkin is ready someone chooses it and pulls it from the vine.

Verify that responses are correct, provide clarification if needed and record responses on chart.

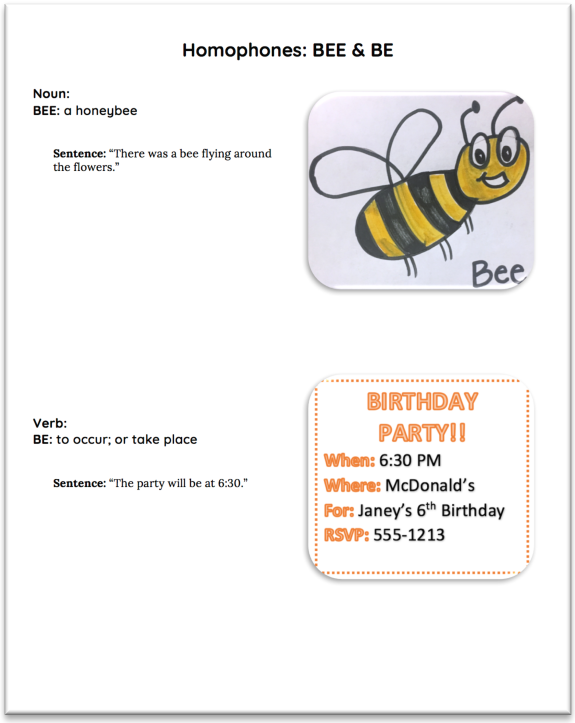
Homophones

T *Now we are going to look at words that are called homophones*

Write "WHERE" AND "WEAR" on the board or display them on a document camera.

T *These two words are called homophones.*
T *They are pronounced the same, but have different spellings and different meanings.*

Project chart on page 22 so students can see.



T *In Growth Cycle of Pumpkins, we hear the word "bees" being used in a sentence on page 3.*
T *Can you find that sentence?*
T *Follow along as I read it aloud.*
T *"Bees and other insects need to visit the flower before a pumpkin appears, so make sure your pumpkin plant goes outdoors."*
T *Now with your partner, 1's I would like you to ask 2's which of these definitions fit our story.*
T *Make sure that they justify and explain their answer.*
T *Then 2's I want you to ask the 1's which definition they think fits our story.*
T *Make sure that they justify and explain their answer.*
T *Then together see if you can agree on one definition.*

Provide time for students to discuss this question. Monitor to ensure that 1's are asking 2's and 2's are answering and then they switch and 2's ask 1's and 1's answer.

Share out and check for understanding

T *Who would like to share their answer?* **Using equity sticks, if available, choose students to answer.** Answer: The first definition bee, like a honeybee. It is not talking about being in a place in the story.

Verify that responses are correct, provide clarification if needed and record responses on chart.

***You may use the exit slip at the end of this lesson as a quick assessment of student understanding. Either print them out (page 19), or simply have students copy the problems on a half sheet of paper.**

It is illegal to copy without express permission.

Name: _ANSWER KEY____Date: _____

Exit Slip: Segment 3

Write a sentence for each of our three words from the story showing you understand the meaning. On the pack side illustrate your sentence by drawing a picture and labeling it.

In the story, Growth Cycle of Pumpkins, the word _____ means _____.

Plant **Pick** **Bee**

Answers will vary

1. **In the story, Growth Cycle of Pumpkins, the word** plant **means** a living organism that grows**.**
2. **In the story, Growth Cycle of Pumpkins, the word** pick **means** to choose or select from a group**.**
3. **In the story, Growth Cycle of Pumpkins, the word** bee **means** a bug that flies like a honeybee**.**

Make sure to "Break Up Your Day!"
Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 24)

 ©2017
It is illegal to copy without express permission.

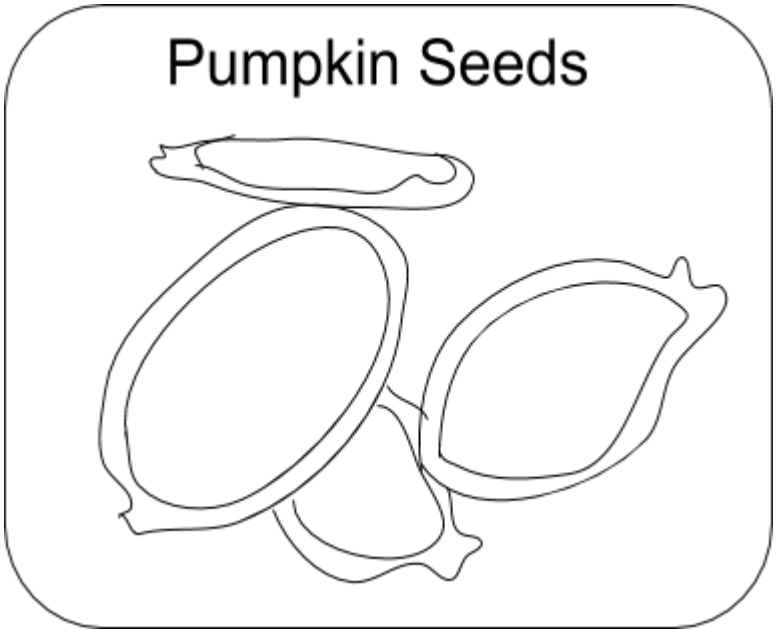
Growth Cycle of Pumpkins

By: Janna Duffy

Every fall you see pumpkins setting on the porches or sidewalks of houses. They look fun and sometimes scary, but where do pumpkins come from? How do you grow a pumpkin? Are there stages in growing a pumpkin?

Yes! There are actually six stages in a pumpkin's growth cycle.

First, you take a pumpkin seed and plant it into rich, dark soil. Make sure you give it plenty of room! Some pumpkin plants can grow ten feet or more.

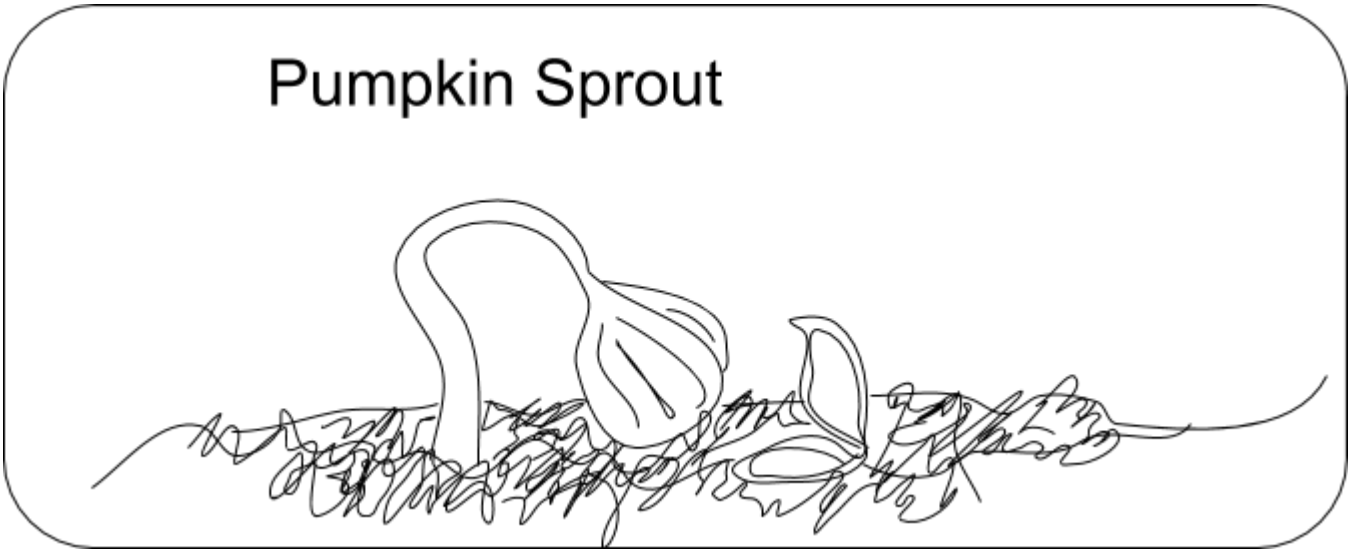


1

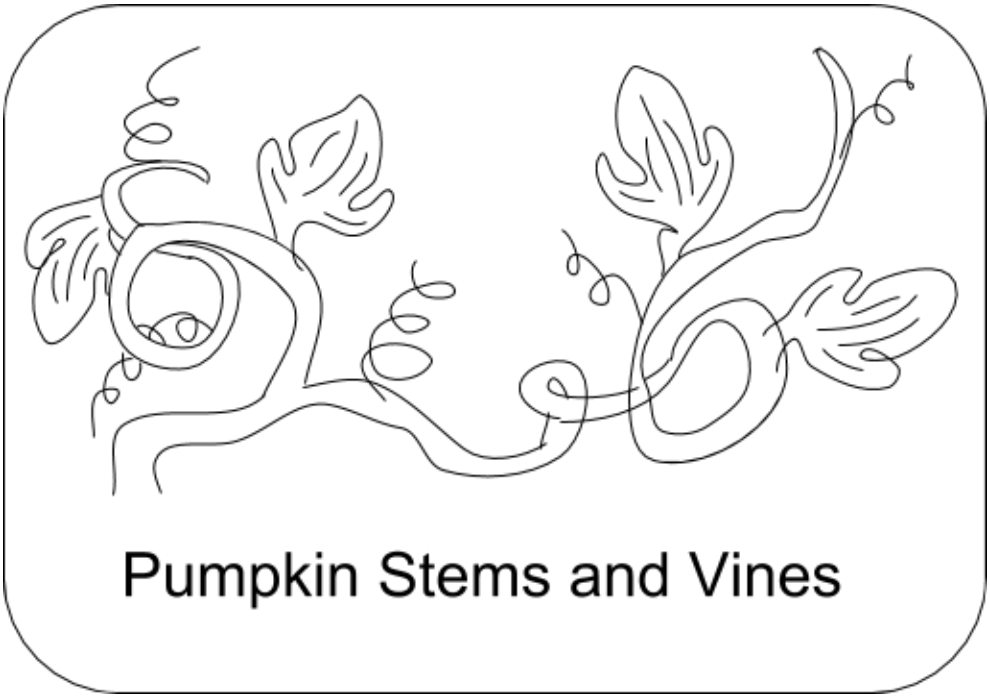
©2017

It is illegal to copy without express permission.

Next, the seed will sprout if it has lots of water and nutrients from the soil.

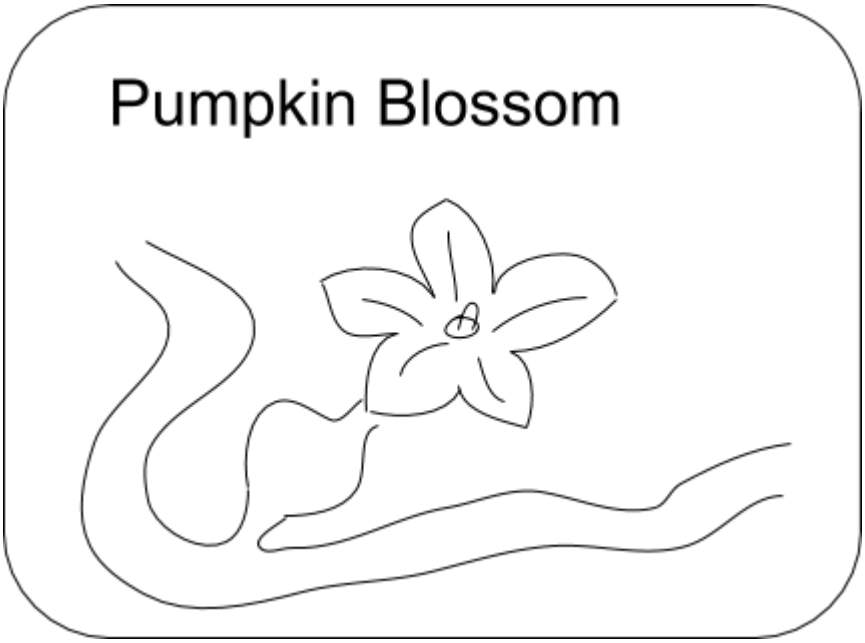


Third, the sprout starts growing stems and vines. This is the exciting part because the vines grow across the soil, across sidewalks, even into other plants.

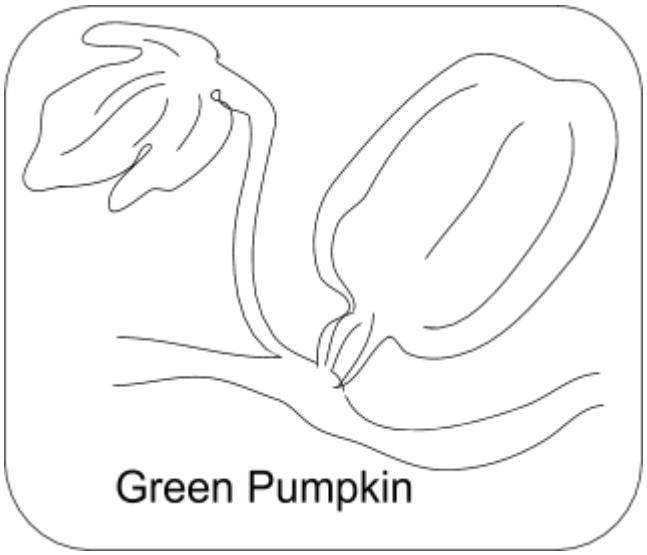


 ©2017
It is illegal to copy without express permission.

Fourth, the blossoms appear and soon become tiny little pumpkins. Bees and other insects need to visit the flower before a pumpkin appears, so make sure your pumpkin plant goes outdoors.

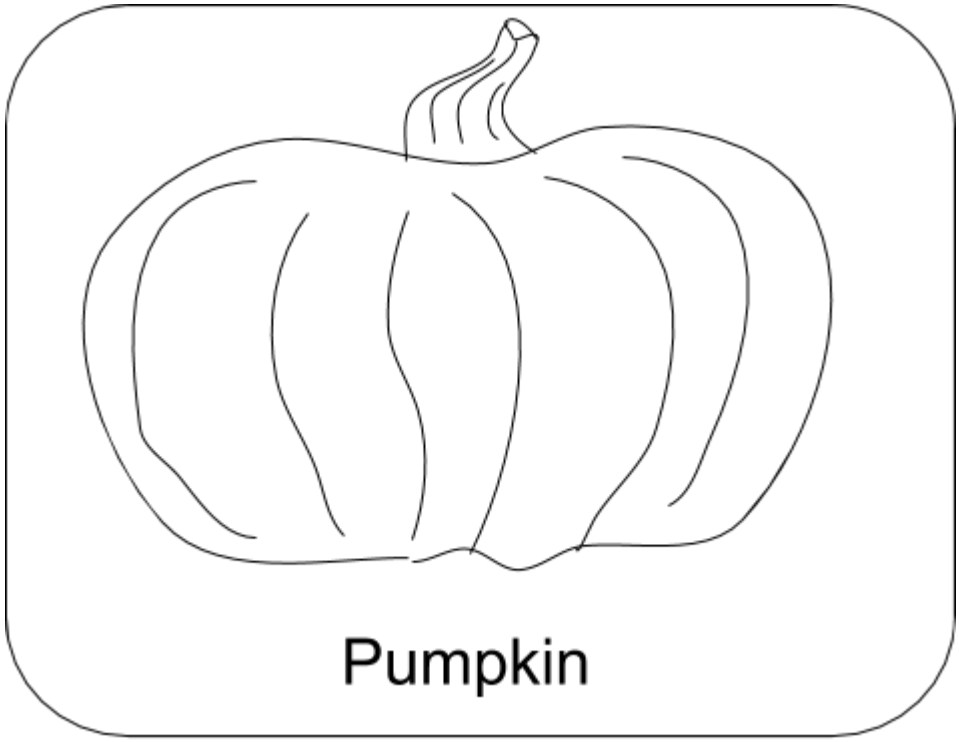


The fifth stage in the pumpkin cycle is unexpected. You see, the pumpkin is green for a long time. It grows and grows and grows until it is almost ripe and ready to pick.



 ©2017
It is illegal to copy without express permission.

The last stage in the cycle is when the pumpkin turns orange. It is ready to pick and take back indoors! You can bake it, carve it or just admire your beautiful gourd. But, remember to save some seeds for next year! 4



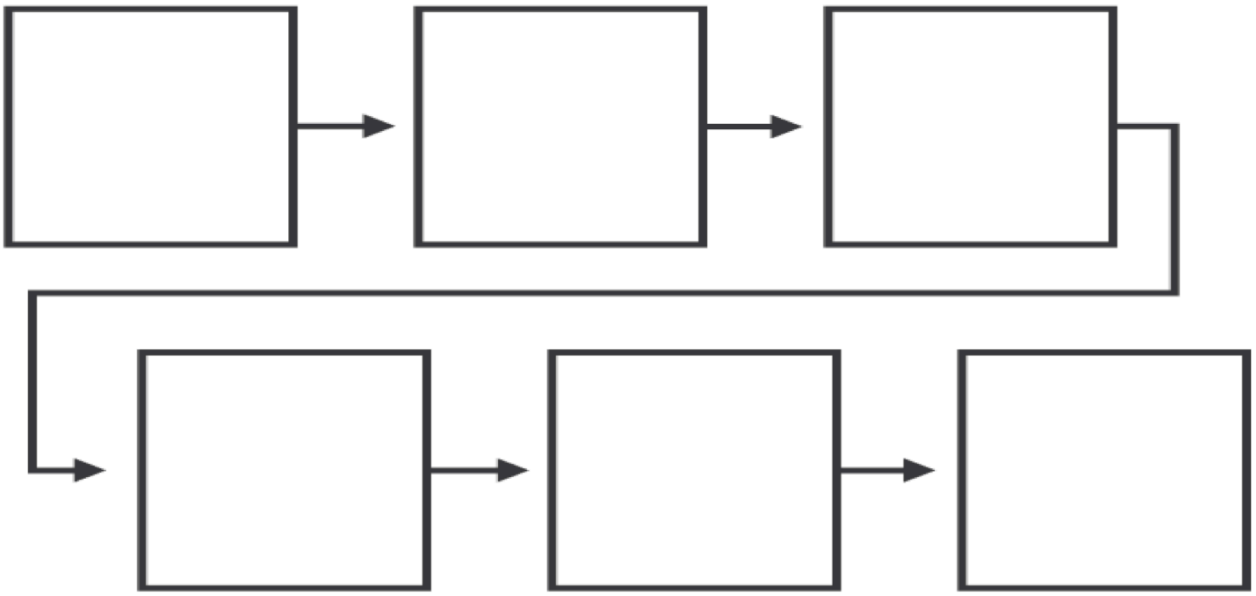
4

©2017
It is illegal to copy without express permission.

Name: _____Date: _____

Exit Slip: Segment 2

Sequencing: Growth Cycle of Pumpkins



Name: _____Date: _____

Exit Slip: Segment 3

Write a sentence for each of our three words from the story showing you understand the meaning.

In the story, Growth Cycle of Pumpkins, the word _____ means _____.

Plant **Pick** **Bee**

1. _____

_____

2. _____

_____

3. _____

_____

©2017

It is illegal to copy without express permission.

Multiple Meaning Word: PLANT

PLANT:

NOUN:

1. A living organism such as a flower or vegetable, typically growing in a permanent site, that absorbs water and inorganic substances through its roots, and synthesizing nutrients in its leaves by photosynthesis using the green pigment chlorophyll.

Sentence: She has a plant in her backyard.

2. A place where an industrial or manufacturing process takes place. Synonyms: factory, shop, mill

Sentence: The company has a plant in the United States

VERB:

1. To place (a seed, bulb, or plant) in the ground so that it can grow. Synonyms: sow, scatter,

Sentence: He planted the seeds in the soil.

2. To place, put, or settle.

Sentence: She planted a kiss on his head.

©2017

It is illegal to copy without express permission.

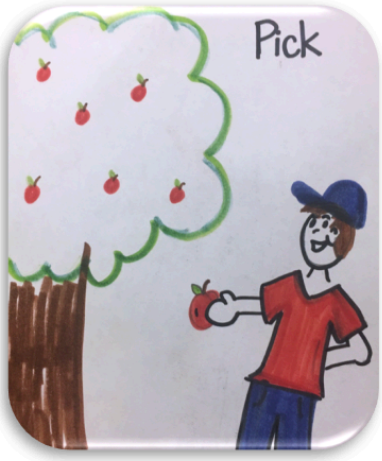
Multiple Meaning Word: PICK

PICK:

VERB:

1. (used with object): To choose or select from among a group.

Sentence: The boy was told to pick a red apple from the tree.



Noun:

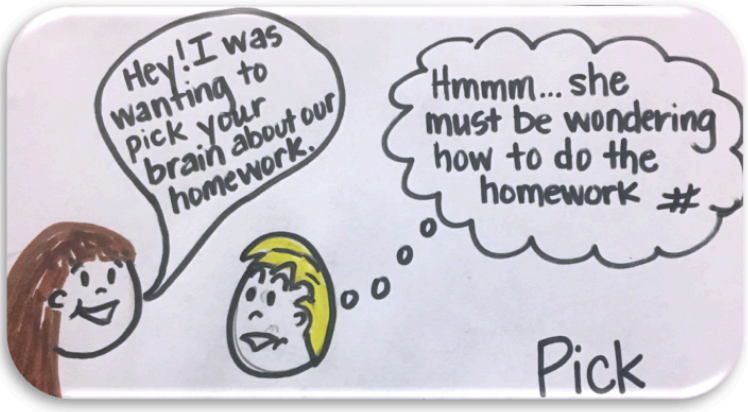
1. A tool used to dig

Sentence: He started digging for gold with his pick.

Idiom:

1. To ask someone questions.

Sentence: "I'd like to pick your brain for a second."



©2017
It is illegal to copy without express permission.

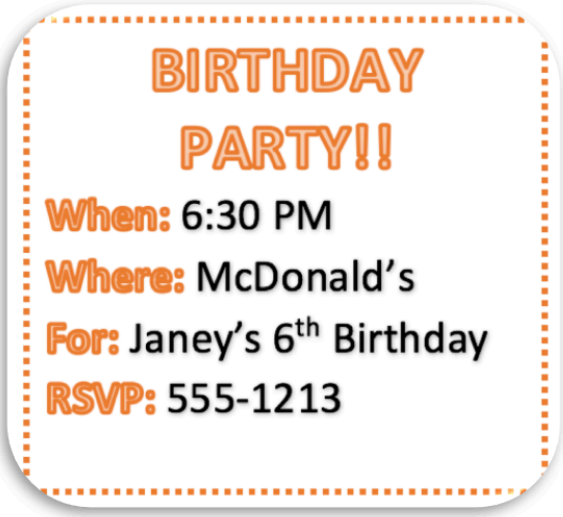
Homophones: BEE & BE

Noun:
BEE: a honeybee

Sentence: "There was a bee flying around the flowers."

Verb:
BE: to occur; or take place

Sentence: "The party will be at 6:30."



©2017
It is illegal to copy without express permission.

Protocols:

Ask, Answer, and Justify

- Put students in pairs: have them assign themselves a number 1 or 2
- Roles for number assignments:
  - 1's will ask the question first and 2's will respond
  - Then 2's will ask the question and 1's will respond
  - The next time 2's ask the question first

On your feet/ Get ready to meet/ Go and Greet (should take less than one minute)

- Students stand up and put their hand up in the air
- Students find another student that has their hand up to have a "new" partner (and get them moving around)
- Once they are with their new partner, they put their hands down and face the teacher

Give one & Get one

- Students share information in Ask & Justify
- Each student in the pair writes down the information shared by their partner
- If the information is already written, a check is put by the information

Back to Back and Face to Face

- When in pairs, direct students to stand back to back
- Ask the students to consider the question
- Give students at least a minute to consider their response
- Have them turn face to face
- Follow the protocol for Ask and Justify

Share out and check for understanding

- Follow the protocol for Ask and Justify
- Ask students to share their response to the question
- Verify that response or conclusion is correct
- If needed, provide clarification

(Used throughout lesson - be familiar with each protocol.)

Note: Place Protocols under a document camera (if available) as necessary throughout the lessons

It is illegal to copy without express permission.

Make sure to "Break Up Your Day!"

These can be used in the middle of a lesson or at the end of your lesson.

Here are a few engaging movement and brain break ideas to get your students moving and ready to refocus!

Break Up Your Day: Body Stretches!

FORMATION: Standing at desks
EQUIPMENT: None
RULES/DIRECTIONS:

- Have students begin the day with a series of simple activities lasting 30 seconds or more: Jumping jacks, Knee lifts, Flap arms like a bird, Hopping Scissors (feet apart then cross in front, feet apart then cross in back)
- Follow each activity with a basic stretching movement: Reach for the sky, Runner's stretch, Butterfly stretch (sit with bottom of feet together), Knee to chest, Rotate ankles, Scratch your back
- Hold stretches for 10 - 30 seconds.
- Repeat a different simple activity followed by a new basic stretch as many times as desired.

Break Up Your Day: Air Writing!

FORMATION: Standing at desks or in small groups
EQUIPMENT: None
RULES/DIRECTIONS:

- Students begin by moving in place or around the room: Jumping, Marching, Hopping, Twisting
- Call out a letter, number, word or shape and students stop activity.
- Students will draw the letter, number, word or shape in the air using their hand, arm, leg, head, elbow, knee, bottom or any combination of body parts until teacher calls out another activity.
- Students continue new activity until teacher calls out another letter, number, word or shape.

Break Up Your Day: The Wiggles!

- Let's get our wiggles out before we continue!
- Stand up and shake out your arms (4-5 seconds to shake) Remember! No one should get hurt! …now FREEZE!
- Now shake the wiggles out of your right leg…FREEZE!
- Now shake the wiggles out of your left leg…FREEZE!
- Now shake all the wiggles out of your whole body….FREEZE!

It is illegal to copy without express permission.

General Information

Lesson Parts & Duration

Total Duration: 2 to 2 ½ hours

- Segment 1: Defining Attributes of Two-Dimensional Shapes (45-60 Minutes)
- Segment 2: Defining Attributes of Three-Dimensional Shapes (45-60 Minutes)
- Segment 3: Segment 3: Creating Composite Shapes (30-60 Minutes)

Subject(s)

- Geometry: Attributes of Two-Dimensional & Three-Dimensional Shapes (2.G.A.1)
- Geometry: Composite Shapes

Objective

- Students will identify defining attributes of two-dimensional shapes (e.g., triangles are closed and three-sided).
- Students will identify defining attributes of three-dimensional solid shapes (e.g., cubes are three-dimensional solids, with 6 faces, 12 edges, and 8 vertices).
- Students will distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) of both 2-dimensional and 3-dimensional shapes.
- Students will build and draw shapes with defining attributes to create composite shapes.

Materials

- **Required:** copy of Mouse Shapes by Ellen Stol Walsh
- white construction paper
- paper (2 per student)
- pencils & crayons
- document camera/ chart paper/ or whiteboard
- **Optional:** models of geometric solids: cube, cylinder, pyramid, rectangular prism, and cone
- **Optional:** printable Exit Slips (page 19)
- **Optional:** printable "2D & 3D Shapes" handouts (pages 20-21)
- **Optional:** Printable "Break Up Your Day" brain/movement break ideas (page 22)

Instructional Setting

- Seated on the floor in front of chart paper or a projected display & seated at desks/tables to complete student work.

Throughout these lessons, you will find:

- ***Scripted Text*** indicates things that need to be said directly. Bullets starting with a **"T"** followed by *italicized type* indicate scripted text
- **Clarifiers** within scripted text are in orange
- **Teacher Directions** indicate things you should be doing
- **Side notes** provide helpful hints, ELL strategies, differentiation and information
- **Break Up Your Day** (Brain/Movement Breaks) are in green boxes (at the end)

Remember!

Quality over quantity. All components do not have to be accomplished; lessons may be ended at any time and resumed later.

©2017

It is illegal to copy without express permission.

Instructional Plan: Segment 1: 45-60 minutes

Subject

- Defining Attributes of Two-Dimensional Shapes

Objective

- Students will identify defining attributes of two-dimensional shapes (e.g., triangles are closed and three-sided).

Materials

- blank paper (1 per student) or printable "2D Shapes" handout (page 20)
- pencils & crayons
- document camera/ chart paper/ or whiteboard
- **Optional:** printable Exit Slip (page 19)

Introduction

T *Do you know what I see every day when I walk around?* Pause for students to think.
T *I see shapes!*
T *There are shapes all around us and each of these shapes has a name.*
T *Just like you and me; something that we call them.*
T *For example, one shape I know is called a circle.*
T *I want you to take a second and think.*
T *Remember to think with your mind and not with your mouth.*
T *Don't tell anyone what shapes you are thinking of.*
T *Let's all close our eyes and think of some shapes we know.* Pause for students to think.
T *Ok, let's open our eyes, but still DON'T tell anyone what shapes you thought of.*
T *We are going to share them in a few minutes!*

Shapes Around the Room!

T *Without telling anyone the shapes you know can you look around the room and see any of these shapes?*
T *Just like you and me shapes have things that make them who they are.*
T *They have different characteristics that we can use to describe them.*
T *There is a big word we use when talking about these things that make the shapes who they are, that word is "attributes".* Write "attributes" on the board or chart paper.
T *Today we will be looking closely at the shapes we know and decide what attributes they have.*
T *There are 2 kinds of attributes, defining, which means they tell us what makes the shape what it is and non-defining which means any shape can have them.*
T *Some examples of a non-defining attributes are what color it is, what size it is, or where it is.*

2-Dimensional Shapes We Know

T *Remember that I told you I see shapes every day?*
T *Well, there are 2 kinds of shapes, two-dimensional or 2D shapes and three-dimensional or 3D shapes.*
T *During this lesson, we are going to just talk about two-dimensional shapes.*
T *Those are the shapes that are flat, like paper.*
T *Now, I would like for you to whisper to a buddy sitting near you all of the shapes you thought of earlier when we closed our eyes.*

Give time for students to share with one another. Walk around and monitor the conversations.

It is illegal to copy without express permission.

While you are monitoring conversations, use this time to pass out 1 piece of paper per student. Make sure they also have a pencil.

- ***T*** *Eyes on me in: 5, 4, 3, 2, 1!*
- ***T*** *Thank you for giving me your attention.*
- ***T*** *Wow, boys and girls it sounds like you all remember your shapes!*
- ***T*** *I have just given you each a piece of paper.*
- ***T*** *On this paper, we are going to make ourselves a chart.*
- ***T*** *On our chart, we will be drawing our shapes and deciding what "attributes" they each have.*

Setting Up the Chart

If you printed the handout on page x you can skip this portion of "Setting Up Your Paper".

- ***T*** *First I want you to put your paper in front of you!* **Demonstrate having your paper horizontally in front of you.**
- ***T*** *We are going to fold our paper in half like a hot dog bun, so it has two long sides.* **Model this and provide assistance as needed.**
- ***T*** *Next, we are going to fold the left side and the right side in towards the middle so that we end up with 6 equal boxes.* **Model this and provide assistance as needed.**
- ***T*** *In the top, center box write "2D SHAPES".*
- ***T*** *"S" "H" "A" "P" "E" "S".* **Spell it out and model writing it where they can see.**

	2D SHAPES	

Give time for students to share with one another. **Walk around and provide assistance as needed. If anyone struggles with writing you can write it lightly for them to trace your letters on their paper.**

- ***T*** *Before we get started filling in our chart let's take a quick break!*

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see pages 22)

- ***T*** *Okay, now that we got our wiggles out, let's get back to our chart.*
- ***T*** *I am going to make my chart first, but I will need you to help me.*

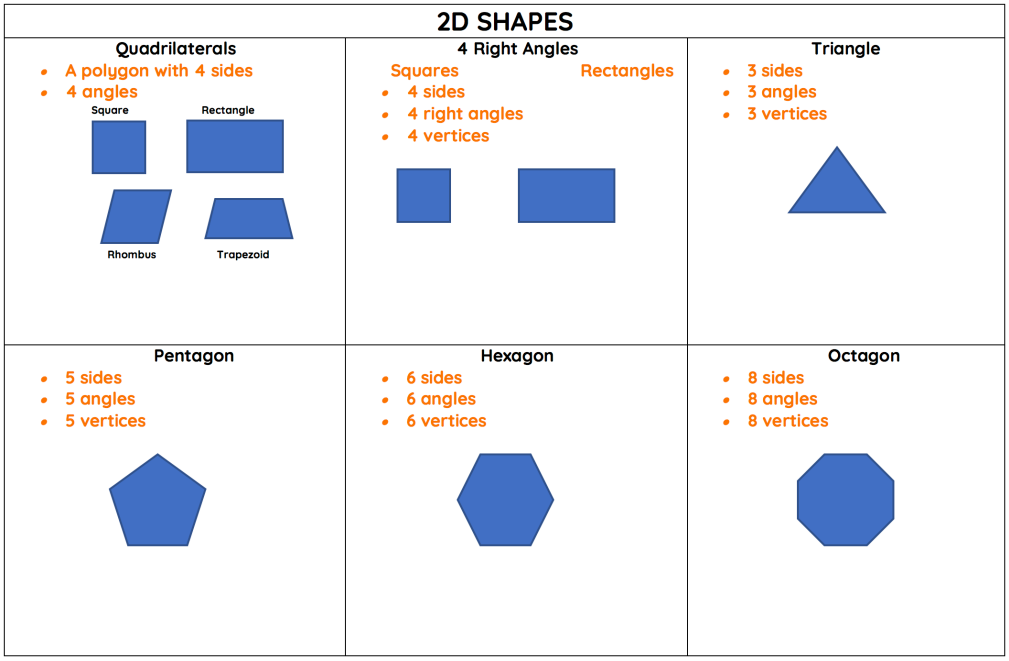
You may want to have students join you up by the board/ piece of chart paper and sit on the floor. Or you can have them put their papers face down so that they aren't distracted.

- ***T*** *I am going to draw a picture of a shape that I know.*
- ***T*** *Then I am going to look at the shape's "attributes".*
- ***T*** *Remember, "attributes" are the characteristics or things we use to describe a shape.*
- ***T*** *I can describe most shapes by looking at a shape's sides and a shape's corners.*
- ***T*** *There is a big fancy math word we use for corners and that is "vertices".*
- ***T*** *Every one say that big fancy word with me… "vertices".*
- ***T*** *Lastly, we can talk about a shape's angles.*
- ***T*** *Angles are made when two sides of a shape are joined at a vertex or corner.*
- ***T*** *These angles can be big obtuse angles, meaning it looks like a mouth open nice and wide.*
- ***T*** *Or they can be small acute angles, meaning it looks like a mouth that is not open very wide.*
- ***T*** *The last kind of angle that I know you talked about in first grade is a right angle or 90-degree angle.*

It is illegal to copy without express permission.

T *This is the angle that is shaped like the letter L.*
T *I can fit a box in the corners of a right angle because they are square corners.*
T *Today we will only be counting our angles and checking to see if they are right angles.*
T *If you feel ready, when I say, "All set" I want you to say "You Bet!" but only if you are ready.*
T *"All set?"* Wait for a majority response of "You bet!"
T *So, I am thinking of all those two-dimensional shapes that I thought of before.*
T *I am sure in first grade you talked about squares, rectangles, triangles*
T *I am going to first draw a picture of a shape.*
T *Then I want to see if you can tell me the shape's name, help me count the sides, and last help me count the vertices, remember that was the big fancy word for corners.*
T *And finally we will count the angles.*

This is the chart you will be making as a demonstration with the class. After you have completed a sample students will either create their own on blank paper or you can print off the handout for them to just fill in. There is also an exit slip containing this exact information that can be used as an assessment.



Quadrilateral

T *I am going to label my first box, "Quadrilateral".* Write it on your paper.
T *A quadrilateral is a polygon that has 4 sides.*
T *The prefix of quadrilateral is "quad" and "quad" actually means 4.*
T *I can think of at least 4 shapes I can put in this category.*
T *Who can help me think of a 4-sided shape?* Call on students. Answers: square, rectangle, rhombus, & trapezoid
T *Great thinking boys and girls.*
T *I am going to draw a square, a rectangle, a rhombus, who looks like a square that got pushed over, and a trapezoid.*
T *Let's count the angles on all 4 of these shapes.* Go one shape at a time to count the angles. Point to each angle as you count.
T *Do any of the angles on my shapes look like they have right angles?*

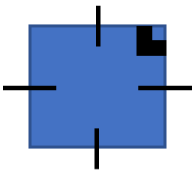
It is illegal to copy without express permission.

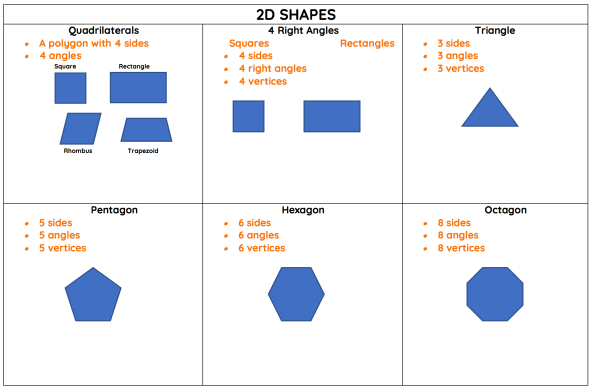
T *Remember those are the angles I can fit a box or letter L inside.* Call on students. Answer: square and rectangle.
T *My square and my rectangle both have 4 right angles.*
T *The rhombus and trapezoid have both big obtuse angles and small acute angles.*
T *These are also closed shapes because there are no openings.*

4 Right Angles

T *Our second box is for shapes that we know that have all right angles.* Write "Right Angles" as your heading of the second box.
T *Who can tell me the names of shapes that would go in this box?* Call on students. Answer: square and rectangle
T *That's right, a square and a rectangle.*
T *We just talked about these two shapes when we were identifying quadrilaterals.*
T *I am going to draw these shapes in my right-angle box.*
T *Let's see how many sides each of our shapes have.*
T *Count with me.* Count the sides and put a line through the side showing how we indicate a side.
T *I am going to write that they each have 4 sides on my chart.*
T *We already know there are 4 right angles in our two shapes.*
T *To show this, I am going to draw a little L or box inside each of the 4 corners.* Example shown on right.
T *I am going to write that there are 4 angles on my chart.*
T *Last I need to count the vertices.*
T *Remember that vertices are the corners of a shape.*
T *Let's see how many vertices each of our shapes have.*
T *Count with me.* Count the vertices and put a dot on them to indicate a vertex.
T *Both shapes are closed shapes because there are no openings.*

Note:
To be more interactive for the students, have them come up and help to count or put the numbers for sides, angles, and vertices.





Draw a Triangle

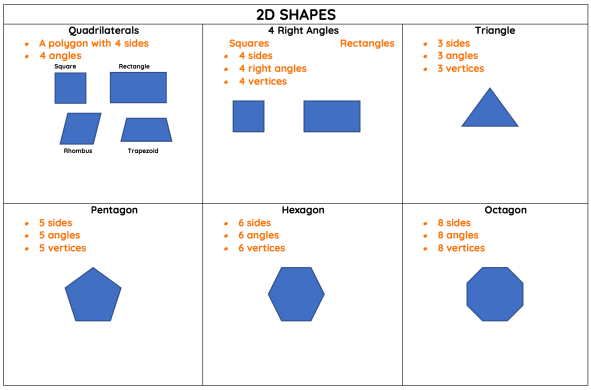
T *This is my third box.* Draw a triangle and point to it.
T *Who can tell me the name of this shape?* Call on students. Answer: triangle
T *Let's look at the attributes or characteristics of a triangle.*
T *How many straight sides does a triangle have?*
T *Let's count them.* Count the sides and put a line through the side showing how we indicate a side.
T *A triangle has 3 straight sides.*
T *I am going to write that it has 3 sides on my chart.*
T *Let's see how many angles a triangle has.*
T *Do you see any right angles?* Answer: no
T *Let's count all out the angles.* Draw an arch in the angles to indicate an angle.
T *A triangle has 3 angles.*
T *I am going to write that it has 3 angles on my chart.*
T *Last, let's count the vertices.*
T *Remember, vertices are the corners.*
T *Let's count them together.*

It is illegal to copy without express permission.

T *There are 3 vertices on a triangle, or 3 corners.*
T *I am going to write that it has 3 vertices on my chart.*
T *A triangle is also a closed shape, there are no openings.*

Draw a Pentagon

T *This is my fourth box.* Draw a pentagon and point to it.
T *Who can tell me the name of this shape?* Call on students. Answer: pentagon
T *Let's look at the attributes or characteristics of a pentagon.*
T *How many straight sides does a pentagon have?*
T *Let's count them.* Count the sides and put a line through the side showing how we indicate a side.
T *A pentagon has 5 straight sides.*
T *I am going to write that it has 5 sides on my chart.*
T *Let's see how many angles a pentagon has.*
T *Do you see any right angles?* Answer: no
T *Let's count all out the angles.* Draw an arch in the angles to indicate an angle.
T *A pentagon has 5 angles.*
T *I am going to write that it has 5 angles on my chart.*
T *Last, let's count the vertices.*
T *Remember, vertices are the corners.*
T *Let's count them together.*
T *There are 5 vertices on a pentagon, or 5 corners.*
T *I am going to write that it has 5 vertices on my chart.*
T *A pentagon is also a closed shape, there are no openings.*



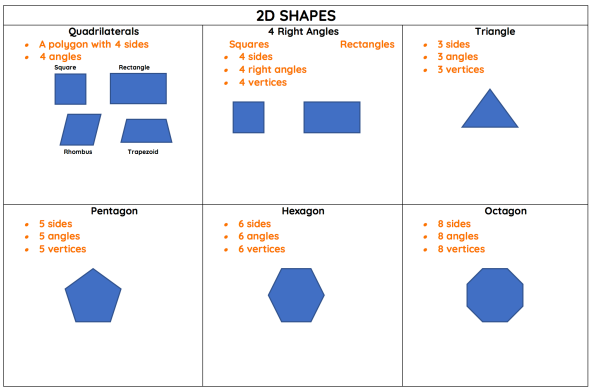
Draw a Hexagon

T *This is my fifth box.* Draw a hexagon and point to it.
T *Who can tell me the name of this shape?* Call on students. Answer: hexagon
T *Let's look at the attributes or characteristics of a hexagon.*
T *How many straight sides does a hexagon have?*
T *Let's count them.* Count the sides and put a line through the side showing how we indicate a side.
T *A hexagon has 6 straight sides.*
T *I am going to write that it has 6 sides on my chart.*
T *Let's see how many angles a hexagon has.*
T *Do you see any right angles?* Answer: no
T *Let's count the angles.* Draw an arch in the angles to indicate an angle.
T *A hexagon has 6 angles.*
T *I am going to write that it has 6 angles on my chart.*
T *Last, let's count the vertices.*
T *Remember, vertices are the corners.*
T *Let's count them together.*
T *There are 6 vertices on a hexagon, or 6 corners.*
T *I am going to write that it has 6 vertices on my chart.*
T *A hexagon is also a closed shape, there are no openings.*

It is illegal to copy without express permission.

Draw an Octagon

T *This is my sixth and final box.* Draw an octagon and point to it.
T *Who can tell me the name of this shape?* Call on students. Answer: octagon
T *Let's look at the attributes or characteristics of an octagon.*
T *How many straight sides does an octagon have?*
T *Let's count them.* Count the sides and put a line through the side showing how we indicate a side.
T *A octagon has 8 straight sides.*
T *I am going to write that it has 8 sides on my chart.*
T *Let's see how many angles an octagon has.*
T *Do you see any right angles?* Answer: no
T *Let's count all out the angles.* Draw an arch in the angles to indicate an angle.
T *An octagon has 8 angles.*
T *I am going to write that it has 8 angles on my chart.*
T *Last, let's count the vertices.*
T *Remember, vertices are the corners.*
T *Let's count them together.*
T *There are 8 vertices on an octagon, or 8 corners.*
T *I am going to write that it has 8 vertices on my chart.*
T *An octagon is also a closed shape, there are no openings.*



If you had students seated in the front to watch you model the activity, send them back to their seats for the next part.

T *Now that you have helped me with my chart it is time for you to fill in your own chart!*
T *Just like I did, you will first draw a picture of the shape.* If you are having them draw the shapes you can have them trace pattern blocks or use a shape template if available, or they can use the printable handout at this point.
T *Let's think of the things we wrote about our shape.*
T *Does anyone remember that big math word I used to tell about its characteristics?*
T *It starts with the letter a.* Call on students. Answer: Attributes
T *We told about our shapes' "attributes".*
T *We counted 3 things on every shape.*
T *Who can tell me what those three things we counted were?* Call on students. Answer: sides, angles, vertices/corners
T *We counted how many straight sides it had, how many angles it had, and how many vertices or corners.*
T *If you remember we also noticed if a shape was open or closed.*
T *And 2 of our shapes had something special in the corners.*
T *Does anyone remember what was special about the corners of 2 of our shapes?* Call on students. Answer: right angles
T *My square and my rectangle had right angles and I was able to draw a little square in the corner.*

It is illegal to copy without express permission.

T *Before we get started filling in our charts let's take a quick break!*

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see pages 22)

Depending on their readiness you can either leave the chart up as a reference for them to copy from or if you feel they are ready you can take it down to make this more challenging.

Note:
If you take down your example be sure to write the words: Sides and vertices on the board for them to copy.

Differentiation:
CHALLENGE: see if there are more shapes that they can add to this list and define the attributes for (septagon (7), decagon (10) ... etc)
SUPPORT: Pull a small group to work with if they are having trouble remember the process. You can also write the words lightly on their page for them to trace.

***You may use the exit slip as a quick assessment of student understanding. Either print them out (page 19), or simply have students copy the problems on a half sheet of paper**

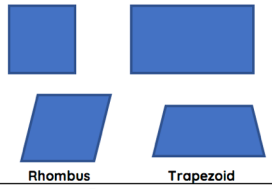
Name: __ANSWER KEY_____Date: _____

Exit Slip: Segment 1

2D SHAPES

Quadrilaterals
- A polygon with 4 sides
- 4 angles

Square, Rectangle, Rhombus, Trapezoid



4 Right Angles

Squares
- 4 sides
- 4 right angles
- 4 vertices

Rectangles
- 4 sides
- 4 right angles
- 4 vertices

Triangle
- 3 sides
- 3 angles
- 3 vertices

Pentagon
- 5 sides
- 5 angles
- 5 vertices

Hexagon
- 6 sides
- 6 angles
- 6 vertices

Octagon
- 8 sides
- 8 angles
- 8 vertices

It is illegal to copy without express permission.

Instructional Plan: Segment 2: 45-60 minutes

Subject

- Geometry: Defining Attributes of Three-Dimensional Shapes

Objective

- Students will identify defining attributes of three-dimensional solid shapes (e.g., cubes are three-dimensional solids, with 6 faces, 12 edges, and 8 vertices).

Materials

- blank paper (1 per student) or printable "3D Shapes" handout (page 21)
- pencil & crayons/colored pencils
- document camera or whiteboard
- **Optional:** models of geometric solids: cube, cylinder, pyramid, rectangular prism, and cone
- **Optional:** printable Exit Slip (page 19)

Introduction

T *Most of the time when someone talks about shapes I think about two-dimensional shapes.*
T *Those flat shapes like squares, rectangles triangles, pentagons, hexagons, and octagons.*
T *But there are other solid objects around that are known as three-dimensional shapes.*
T *These are the ones that I can pick up and put things inside.*
T *They are known as geometric solids.*
T *Today we are going to explore 5 geometric solids.*
T *I think the most well-known geometric solid is a cube.*
T *What things can you think of in the world that are in the shape of a cube.* Either draw a cube on the board or project the image from the student handout so that students have a visual image.
T *Let's all close our eyes and think of some objects that are shaped like a cube.*
T *Remember to think with your mind and not with your mouth!* Pause for students to think.
T *Ok, let's open our eyes, but still DON'T tell anyone what objects you thought of.*
T *We are going to share them in a few minutes!*

Shapes Around the Room!

T *Without telling anyone the objects you thought of, can you look around the room and see any of these objects in our classroom?*
T *Just like you and me three-dimensional shapes have things that make them who they are.*
T *They have different characteristics that we can use to describe them.*
T *There is a big word we use when talking about these things that make the shapes who they are, that word is "attributes".* Write "attributes" on the board or chart paper.
T *Today we will be looking closely at the three-dimensional shapes we know and decide what attributes they have.*
T *There are 3 main attributes that we use to describe our geometric solids or three-dimensional shapes.*
T *These three-dimensional shapes have faces.*
T *I know that sounds silly, not faces like you and me.*
T *The face on our three-dimensional shapes looks like a basic two-dimensional shape.*
T *Like a square, a triangle, or a rectangle.*
T *And unlike us most three-dimensional shapes have several or many faces.*
T *The next attribute we look at are the edges of a shape.*
T *Point to the edge of your desk/table.*
T *An edge is like a straight line or like a side on a two-dimensional shape.*

It is illegal to copy without express permission.

- ***T*** *An edge is the line where 2 faces meet on a solid object.*
- ***T*** *Last we look at how many vertices a three-dimensional shape has.*
- ***T*** *Vertices are like the corners of the shape.*
- ***T*** *On a three-dimensional shape, it is a point where 2 or more edges meet at a corner.*
- ***T*** *When I am talking about just one, I actual call it a vertex.*

3-Dimensional Shapes We Know

- ***T*** *Now, I would like for you to whisper to a buddy sitting near you all the solid objects that are shaped like a cube you thought of early when we closed our eyes.*

Give time for students to share with one another. Walk around and monitor the conversations.
While you are monitoring conversations, use this time to pass out 1 piece of paper per student. Make sure they also have a pencil.

- ***T*** *Eyes on me in: 5, 4, 3, 2, 1!*
- ***T*** *Thank you for giving me your attention.*
- ***T*** *Wow, boys and girls it sounds like you all thought of a lot of things shaped like a cube!*
- ***T*** *I have just given you each a piece of paper.*
- ***T*** *On this paper, we are going to make ourselves a chart.*
- ***T*** *On our chart, we will be drawing our shapes and deciding what "attributes" they each have.*

Setting Up the Chart

If you printed the handout on page X you can skip this portion of "Setting Up Your Paper".

- ***T*** *First I want you to put your paper in front of you!* Demonstrate having your paper horizontally in front of you.
- ***T*** *We are going to fold our paper in half like a hot dog bun, so it has two long sides.* Model this and provide assistance as needed.
- ***T*** *Next, we are going to fold the left side and the right side in towards the middle so that we end up with 6 equal boxes.* Model this and provide assistance as needed.
- ***T*** *In the top, center box write "3D SHAPES".*
- ***T*** "S" "H" "A" "P" "E" "S". Spell it out and model writing it where they can see. If anyone struggles with writing you can write it lightly for them to trace your letters on their paper.

	3D SHAPES	

Give time for students to share with one another. Walk around and provide assistance as needed. If anyone struggles with writing you can write it lightly for them to trace your letters on their paper.

- ***T*** *Before we get started filling in our chart let's take a quick break!*

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see pages 22)

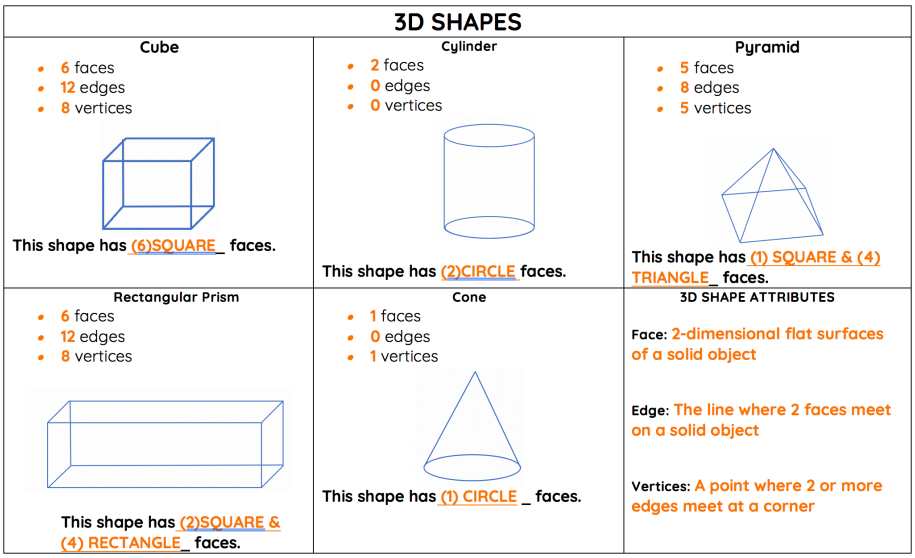
- ***T*** *Okay, now that we got our wiggles out, let's get back to our chart.*
- ***T*** *I am going to make my chart first, but I will need you to help me.*

You may want to have students join you up by the board/ piece of chart paper and sit on the floor. Or you can have them put their papers face down so that they aren't distracted.

It is illegal to copy without express permission.

T *I am going to draw a picture of a three-dimensional shape that I know.*
T *Then I am going to look at the shape's "attributes".*
T *Remember, "attributes" are the characteristics or things we use to describe a shape.*
T *I can describe most three-dimensional shapes by looking at 3-main attributes.*
T *Remember I told you about the faces, edges, and vertices.*
T *The faces are a basic 2-dimensional shape.*
T *The edges are the straight sides of a shape.*
T *And last the vertices or corners of my shape, where two edges meet!*

This is the chart you will be making as a demonstration with the class. You can also use a student handout to fill in if it is too difficult for you to draw the 3D shapes. Just cover the names so that students have the chance to guess the name of the 3D Shape After you have completed a sample students will either create their own on blank paper or you can print off the handout for them to just fill in. There is also an exit slip containing this exact information that can be used as an assessment.



Cube

T *I am going to draw/show you our first shape.* Draw or project it for students to see. If projecting, make sure that the name is covered for guessing purposes.
T *Who can tell me the name of this shape?* **Call on students.** Answer: cube; write cube above the image once it was guessed correctly.
T *Let's look at the attributes or characteristics of a cube.*
T *The first attribute that we will look at is the faces.*
T *Does anyone see a two-dimensional shape on this geometric solid?*
T *What shape do you see?* **Call on students.** Answer: a square
T *A face on a cube is shaped like a square.*
T *I am going to write that on my chart.*
T *Let's count how many faces there are on our cube.* Count the faces together. You may want to use a box or dice to help visually show this.
T *A cube has 6 faces.*
T *I am going to write that it has 6 faces on my chart.*
T *Let's see how many edges a cube has.*

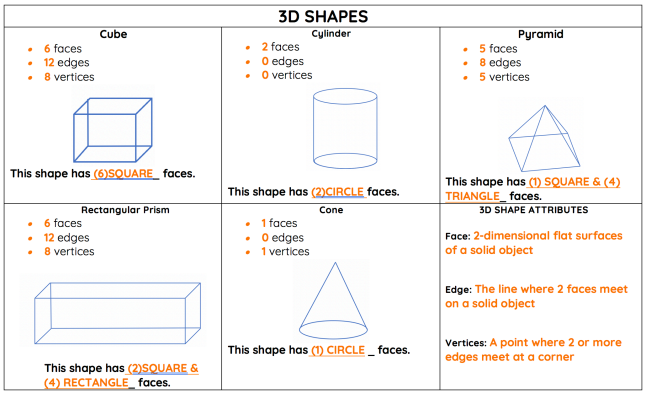
It is illegal to copy without express permission.

T *Remember edges are the straight lines.*
T *Count with me.* Point to and count 12 edges. You can highlight or color the lines on the shape to help to illustrate this.
T *A cube has 12 edges.*
T *I am going to write that a cube has 12 edges on my chart.*
T *Last, let's count the vertices or the corners of a cube.* Point to and count 8 vertices. You can put dots in all 8 corners to illustrate this.
T *A cube has 8 vertices.*
T *I am going to write that on my chart.*

Cylinder

T *I am going to draw/show you our second shape.* Draw or project it for students to see. If projecting, make sure that the name is covered for guessing purposes.
T *Who can tell me the name of this shape?* Call on students. Answer: cylinder; write cylinder above the image once it was guessed correctly.
T *Let's look at the attributes or characteristics of a cylinder.*
T *The first attribute that we will look at is the faces.*
T *Does anyone see a two-dimensional shape on this geometric solid?*
T *What shape do you see?* Call on students. Answer: a circle
T *A face on a cylinder is shaped like a circle.*
T *I am going to write that on my chart.*
T *Let's count how many faces there are on our cylinder.* Count the faces together. You may a roll of paper towels, or a can to help visually show this.
T *A cylinder has 2 faces.*
T *The center part of a cylinder if unwrapped is the shape of a rectangle, but it is not a face.*
T *I am going to write that it has 2 faces on my chart.*
T *Let's see how many edges a cylinder has.*
T *Remember edges are the straight lines.*
T *Count with me.* Look puzzled because you see no straight lines.
T *A cylinder has 0 straight edges.*
T *All the sides of this shape are curved.*
T *I am going to write that a cylinder has 0 edges on my chart.*
T *Last, let's count the vertices or the corners of a cylinder.* Look puzzled because you see no vertices or corners.
T *Just like it has no edges, it also has no vertices or no corners.*
T *A cylinder has 0 vertices.*
T *I am going to write that on my chart.*

Note:
To be more interactive for the students, have them come up and help to count or put the numbers for sides, angles, and vertices.

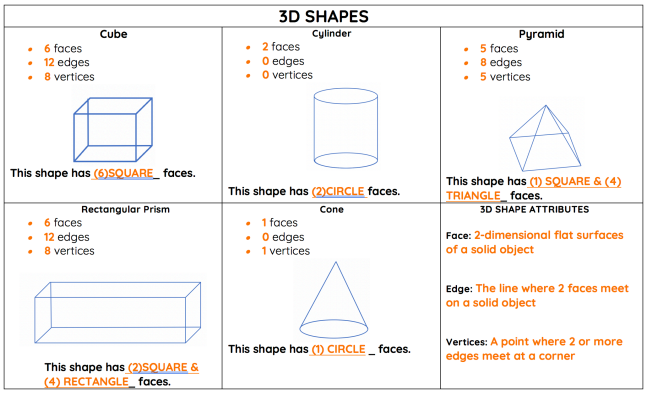


Pyramid

T *I am going to draw/show you our third shape.* Draw or project it for students to see. If projecting, make sure that the name is covered for guessing purposes.
T *Who can tell me the name of this shape?* Call on students. Answer: pyramid; write pyramid above the image once it was guessed correctly.

It is illegal to copy without express permission.

T *Let's look at the attributes or characteristics of a pyramid.*
T *The first attribute that we will look at is the faces.*
T *Does anyone see a two-dimensional shape on this geometric solid?*
T *What shape do you see?* Call on students. Answer: a square or triangle
T *I actually see two shapes.*
T *I see a square at the bottom or the base of this shape and I see a triangle on the sides.*
T *A face on a pyramid is shaped like a square and a triangle.*
T *I am going to write that on my chart.*
T *Let's count how many faces there are on our pyramid.* Count the faces together. You may want to use square pyramid if you have anything in the room in that shape.
T *I am going to write that it has 5 faces on my chart.*
T *Let's see how many edges a pyramid has.*
T *Remember edges are the straight lines.*
T *Count with me.* Point to and count 8 edges. You can highlight or color the lines on the shape to help to illustrate this.
T *A pyramid has 8 edges.*
T *I am going to write that a pyramid has 8 edges on my chart.*
T *Last, let's count the vertices or the corners of a pyramid.* Point to and count 5 vertices. You can put dots in all 5 corners to illustrate this.
T *A pyramid has 5 vertices.*
T *I am going to write that on my chart.*



Rectangular Prism

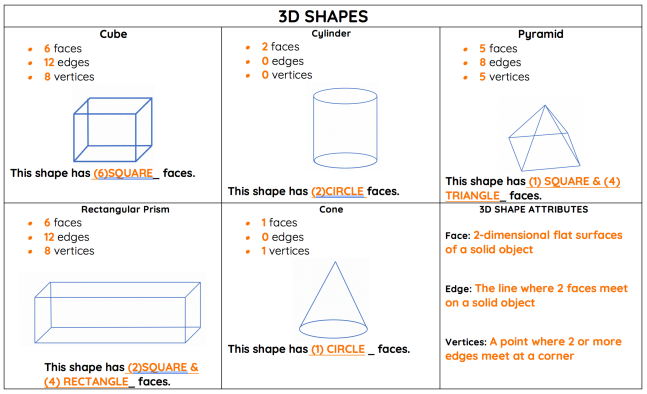
T *I am going to draw/show you our fourth shape.* Draw or project it for students to see. If projecting, make sure that the name is covered for guessing purposes.
T *Who can tell me the name of this shape?* Call on students. Answer: rectangular prism; write rectangular prism above the image once it was guessed correctly.
T *Let's look at the attributes or characteristics of a rectangular prism.*
T *The first attribute that we will look at is the faces.*
T *Does anyone see a two-dimensional shape on this geometric solid?*
T *What shape do you see?* Call on students. Answer: a square or rectangle
T *I actually see two shapes.*
T *I see a square one each side of this shape and I see 4 rectangles in the front, back, top, and bottom of this shape.*
T *The faces on a rectangular prism are shaped like a square and a rectangle.*
T *I am going to write that on my chart.*
T *Let's count how many faces there are on our rectangular prism.* Count the faces together. You may want to use long Kleenex box or something of a similar shape in the room to help illustrate this.
T *I am going to write that it has 6 faces on my chart.*
T *Let's see how many edges a rectangular prism has.*
T *Remember edges are the straight lines.*
T *Count with me.* Point to and count 12 edges. You can highlight or color the lines on the shape to help to illustrate this.
T *A rectangular prism has 12 edges.*
T *I am going to write that a rectangular prism has 12 edges on my chart.*
T *Last, let's count the vertices or the corners of a rectangular prism.* Point to and count 8 vertices. You can put dots in all 8 corners to illustrate this.

It is illegal to copy without express permission.

T *A rectangular prism has 8 vertices.*
T *I am going to write that on my chart.*

Cone

T *I am going to draw/show you our fifth and last shape.* Draw or project it for students to see. If projecting, make sure that the name is covered for guessing purposes.
T *Who can tell me the name of this shape?* Call on students. Answer: cone; write cone above the image once it was guessed correctly.
T *Let's look at the attributes or characteristics of a cone.*
T *The first attribute that we will look at is the faces.*
T *Does anyone see a two-dimensional shape on this geometric solid?*



T *What shape do you see?* Call on students. Answer: a circle
T *A face on a cone is shaped like a circle.*
T *I am going to write that on my chart.*
T *Let's count how many faces there are on our cone.*
T *Let's count them.* Count the faces together. You may use anything in the classroom that you find that is the shape of a cone to help visually show this.
T *A cone has 1 face.*
T *I am going to write that it has 1 face on my chart.*
T *Let's see how many edges a cylinder has.*
T *Remember edges are the straight lines.*
T *Count with me.* Look puzzled because you see no straight lines.
T *A cone has 0 straight edges.*
T *All the sides of this shape are curved.*
T *I am going to write that a cone has 0 edges on my chart.*
T *Last, let's count the vertices or the corners of a cone.* Count just the top point
T *A cone has only 1 vertex at the very top.*
T *I am going to write that on my chart.*

T *We have one box left to fill in.*
T *In our last box lets label it "3D Shape Attributes".*
T *Now that we have practiced with 5 three-dimensional shapes, let's see if you can define face, edge, and vertices.*
T *Who would like to try?* Call on students to share their definitions, once a student is close to the definition on the example you can rephrase it to be the correct definition and write it on your chart.
Answers: Face: 2-dimensional flat surface of a solid object. Edge: The line where 2 faces meet on a solid object. Vertices: A point where 2 or more edges meet at a corner.

If you had students seated in the front to watch you model the activity, send them back to their seats for the next part.

For this next part, it would be very helpful to print out the student hand out since 3D shapes are very hard to draw. If you are not able to do so, I would suggest having them draw a picture of something that is that shape or just do their best to draw the 3D figure.

It is illegal to copy without express permission.

T *Now that you have helped me with my chart it is time for you to fill in your own chart!*
T *Just like I did, you will first draw a picture of the shape or an object that you can think of that is that shape.*
T *For example, for my cube, I can draw dice.*
T *Let's think of the things we wrote about our shape.*
T *Does anyone remember that big math word I used to tell about its characteristics?*
T *It starts with the letter a.* **Call on students.** Answer: Attributes
T *We told about our shapes' "attributes".*
T *We counted 3 things on every shape.*
T *Who can tell me what those three things we counted were?* **Call on students.** Answer: faces, edges, and vertices.
T *We counted how many faces or two-dimensional shapes there are on our three-dimensional shape.*
T *We counted how many straight edges our shape had and last how many vertices or corners it had.*
T *Before we get started filling in our charts let's take a quick break!*

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see pages 22)

Depending on their readiness you can either leave the chart up as a reference for them to copy from or if you feel they are ready you can take it down to make this more challenging.

Note:
If you take down your example be sure to write the words: Sides and vertices on the board for them to

Differentiation:
CHALLENGE: see if there are more shapes that they can add to this list and define the attributes for (trapezoid, hexagon, octagon… etc)
SUPPORT: Pull a small group to work with if they are having trouble remember the process. You can also write the words lightly on their page for them to trace.

If you are crunched for time you can always have students use the exit slip to show understanding rather than making their own chart like yours. There is a printable exit slip on page 19. The answer key is found on the next page.

It is illegal to copy without express permission.

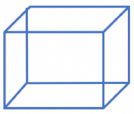
Name: _ANSWER KEY_____Date: _____

Exit Slip: Segment 2

3D SHAPES

Cube

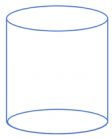
- 6 faces
- 12 edges
- 8 vertices



This shape has (6)SQUARE_ faces.

Cylinder

- 2 faces
- 0 edges
- 0 vertices



This shape has (2)CIRCLE faces.

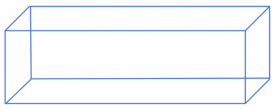
Pyramid

- 5 faces
- 8 edges
- 5 vertices

This shape has (1) SQUARE & (4) TRIANGLE_ faces.

Rectangular Prism

- 6 faces
- 12 edges
- 8 vertices



This shape has (2)SQUARE & (4) RECTANGLE_ faces.

Cone

- 1 faces
- 0 edges
- 1 vertices

This shape has (1) CIRCLE _ faces.

3D SHAPE ATTRIBUTES

Face: 2-dimensional flat surfaces of a solid object

Edge: The line where 2 faces meet on a solid object

Vertices: A point where 2 or more edges meet at a corner

It is illegal to copy without express permission.

Instructional Plan: Segment 3: 30-60 minutes

Subject

- Creating Composite Shapes

Objective

- Students will distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) of both 2-dimensional and 3-dimensional shapes.
- Students will build and draw shapes with defining attributes to create composite shapes.

Materials

- **Required:** copy of Mouse Shapes by Ellen Stol Walsh
- white construction paper
- crayons
- pencils

If you do not have a copy of Mouse Shapes you can find "read alouds" online by searching the title of the book.

Introduction

T *Today I have a really great book for us to read about mice and shapes!*

Read story

Make sure students are seated in a way that they can see the pictures as you read.

On each page, after reading the text, pause and let students look at the illustrations for a few moments. After reading 2 pages stop for a quick discussion.

T *There are so many colorful pictures in this book!*
T *Can you see what the pictures are made of?*
T *Turn and talk with a buddy nearby what the pictures in this story are made up of.*
T *Remember only one buddy talks at a time.* Give students about 15 seconds each, then ask them to switch.

Using equity sticks, if available, choose students to answer in complete sentence,

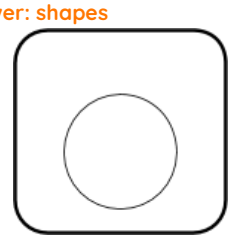
"The pictures are made of _____."

T *Who would like to share their answer with the class in a complete sentence, for example: "The pictures are made of _____."* **Call on students to share their answers.** Answer: shapes

Continue to read the text, allowing students to pause and look at the illustrations and the shapes that are used.

T *Okay, we are going to make our own "Mouse Shape".*

Demonstrate on a whiteboard or chart paper



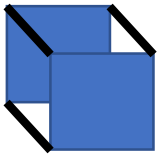
T *I need you to help me.*
T *If I were going to draw a mouse shape like the ones in the book, what shape could I use for the body?*
T *Talk with your buddy and raise your hand when you both have an answer.* **Call on students to share answers.** Most likely answer: circle

Depending on answer, draw the body, then the head, ears, arms, legs, and tail.

It is illegal to copy without express permission.

Independent or Partner Practice

- ***T*** *Now that you have seen the illustrator of our book, Mouse Shapes create pictures using basic shapes and you have seen me create a picture using shapes… it's your turn!*
- ***T*** *You will first draw your own picture of a mouse using basic shapes.*
- ***T*** *Although our story Mouse Shapes did not include 3-dimensional shapes you may still include them in your drawing.*
- ***T*** *Remember, your drawing can only be made of shapes!*
- ***T*** *Then you can get another piece of paper to make another picture using only 2-dimensional and 3-dimensional shapes.*
- ***T*** *What are some things you could draw?* **Call on students to share their ideas. List the ideas they mention on the board. Ideas: a house, a car, an animal, a person….**
- ***T*** *I will come around and give you a piece of paper.*
- ***T*** *Once you have your paper, write your name at the top.*
- ***T*** *Then you may begin drawing your mouse.*
- ***T*** *After you finish you will need to show me your mouse before you can make a new drawing.*
- ***T*** *Before you get started I would like to quickly teach you how to easily draw a cube.*
- ***T*** *First draw a square on your paper.*
- ***T*** *Move half way down your square and over to the right until you reach the center of your square and draw a new square.*
- ***T*** *Then connect the corners that you can see.*
- ***T*** *Connect the top left corner to the top left corner and the top right corner to the top right corner.*
- ***T*** *Last connect the bottom left corners and the bottom right corners.*
- ***T*** *That's it! You just made a cube.*
- ***T*** *I can help you if you need more help.*



Pass out 1 piece of blank paper per student. Remind them to put their name on it. Walk around and monitor the drawings, reminding them to only use shapes. Make sure they check in with you before they begin a new drawing.

If there is time you can allow them to color their drawings if you have first checked to make sure it is made up of shapes.

Differentiation:

CHALLENGE: Encourage students who are ready to use more complicated shapes (pentagon, hexagon, octagon, decagon ect.). You can also challenge them to define the attributes of the shapes they have used

SUPPORT: You may want to provide students with pattern blocks or tangram pieces that they can trace to make their drawing if you notice they are struggling with freehand drawing the shapes.

Make sure to "Break Up Your Day!"

Now is a great time to take a break and get students re-energized.
See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 22)

It is illegal to copy without express permission.

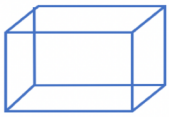
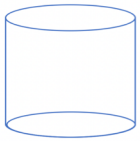
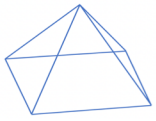
Name: _____Date: _____

Exit Slip: Segment 1

2D SHAPES		
Quadrilaterals • A polygon with ___ sides • ___ angles Square Rectangle Rhombus Trapezoid	**4 Right Angles** Squares Rectangles • ___sides • ___ right angles • ___vertices	**Triangle** • ___ sides • ___ angles • ___ vertices
Pentagon • ___ sides • ___ angles • ___ vertices	**Hexagon** • ___ sides • ___ angles • ___ vertices	**Octagon** • ___ sides • ___ angles • ___ vertices

Name: _____Date: _____

Exit Slip: Segment 2

3D SHAPES		
Cube • _____faces • _____ edges • _____vertices  This shape has_____faces.	**Cylinder** • _____faces • _____ edges • _____vertices  This shape has_____faces.	**Pyramid** • _____faces • _____ edges • _____vertices  The face of this shape is a _____
Rectangular Prism • _____faces • _____ edges • _____vertices  This shape has_____faces.	**Cone** • _____faces • _____ edges • _____vertices  This shape has_____faces.	**3D SHAPE ATTRIBUTES** Face: Edge: Vertices:

It is illegal to copy without express permission.

2D SHAPES

Triangle
- ___ sides
- ___ angles
- ___ vertices

Octagon
- ___ sides
- ___ angles
- ___ vertices

4 Right Angles
Squares Rectangles
- ___ sides
- ___ right angles
- ___ vertices

Hexagon
- ___ sides
- ___ angles
- ___ vertices

Quadrilaterals
A polygon with ___ sides
- ___ angles

Pentagon
- ___ sides
- ___ angles
- ___ vertices

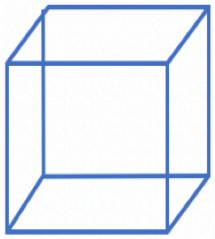
©2017

It is illegal to copy without express permission.

3D SHAPES

Cube

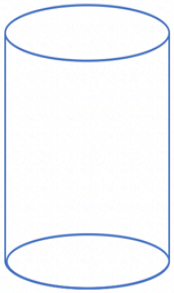
- ____faces
- ____ edges
- ____vertices



This shape has _____faces.

Cylinder

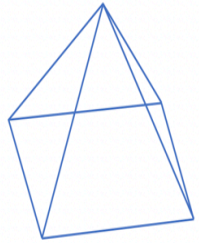
- ____faces
- ____ edges
- ____vertices



This shape has _____faces.

Pyramid

- ____faces
- ____ edges
- ____vertices



The face of this shape is a _____

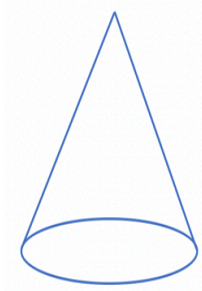
Rectangular Prism

- ____faces
- ____ edges
- ____vertices

This shape has _____faces.

Cone

- ____faces
- ____ edges
- ____vertices



This shape has _____faces.

3D SHAPE ATTRIBUTES

Face:

Edge:

Vertices:

daybreaklessonplans.com ©2017
It is illegal to copy without express permission.

Make sure to "Break Up Your Day!"

These can be used in the middle of a lesson or at the end of your lesson.
Here are a few engaging movement and brain break ideas to get your students moving and ready to refocus!

Break Up Your Day: The Wiggles!

- Let's get our wiggles out before we continue!
- Stand up and shake out your arms (4-5 seconds to shake) Remember! No one should get hurt! …now FREEZE!
- Now shake the wiggles out of your right leg…FREEZE!
- Now shake the wiggles out of your left leg…FREEZE!
- Now shake all the wiggles out of your whole body….FREEZE!
- And sit back down quietly please…Thank you!

Break Up Your Day: Body Spell!

- We are going to use our bodies to practice making some letters of the alphabet. Please stand up quietly.
- When I say a letter, you use your arms, legs, head, and body to see if you can make that letter!"
- Choose 5-6 letters to have students make with their body. You could even try some simple words or letters that their names start with to change it up! Have them sit down quietly when they are finished.

Break Up Your Day: I Spy Shapes!

- Teacher begins by modeling an example:
- I spy with my eye an object in this room in the shape of a triangle.
- Look around and see if you can spy the same object.
- "Raise your hand if you have a guess."
- When they take a guess, let them know if they are cold (not even close, a different shape) or hot (close, that is the same shape, but not what I spy)
- Play again, each time letting the student who "spied" the object correctly and justifies their guess by stating the correct attributes of the shape, be the next "SPY".

©2017

It is illegal to copy without express permission.