

Colten

Week 3/16/20-3/20/20

ELA:

- Reading A to Z packets:
Monday: I Did Not Give Up
Tuesday: Do Not Eat That
Wednesday: Animal Costumes
Thursday: All About Foxes
Friday: Bees Feed Me
- Grammar: complete Monday, Wednesday and Friday
(pages 83-84, 85. & 88)
 - Prepositional Phrases pg. 83-84
 - Sentence Fragments pg. 85
 - Sentence Fragments part 2 pg. 88

Mathematics

- Envision Math Lesson 15-1: Lines, Rays, and Angles

Science

- www.Sciencea-z.com

Login: will be emailed or sent via remind

- Lesson: Atmosphere and Climate (It will be under assigned lessons)

Social Studies

- www.socialstudiesweekly.com

Login: will be emailed or sent via remind

- Lesson: Week #4 Indigenous Peoples

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Week 3/30/20-4/3/20

ELA:

- Parts of Speech packet labeled week#2 3/30/20-4/3/20
- Grammar: complete Monday, Wednesday and Friday (pages 89-91)
 - Run-On Sentences 1 pg. 89
 - Run-On Sentences 1 part 2 pg. 90
 - Run-On Sentences 2 pg. 91

Mathematics

- Envision Math Lesson 15-2: Understand Angles and Unit Angles

Science

- www.Sciencea-z.com

Login: will be emailed or sent via remind

- Lesson: Minerals, Rocks, and Soil (It will be under assigned lessons)

Social Studies

- www.socialstudiesweekly.com

Login: will be sent via email or remind

- Lesson: Week #5 Native People Encounter Europeans

Colten

Monday

3/16/20

Prepositional Phrases

A **prepositional phrase** includes a preposition, the object of the preposition, and any describing words that come in between. (See *Write Source* pages 566 and 598.) The prepositional phrases below describe where the cats are located.

Examples

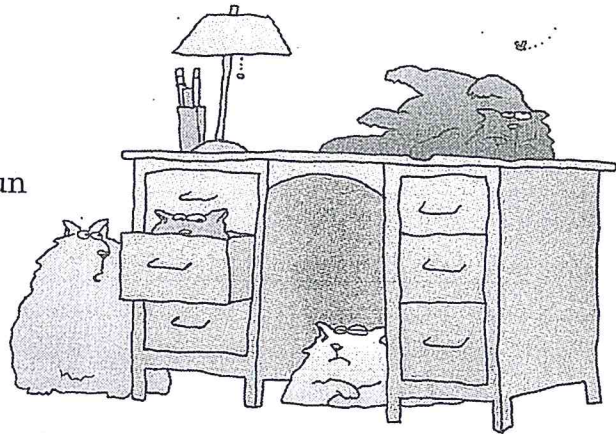
A cat is **on top of** the desk.

(This prepositional phrase includes the compound preposition *on top of*, the noun object *desk*, and the adjective *the*.)

Another cat is **in** the middle drawer.

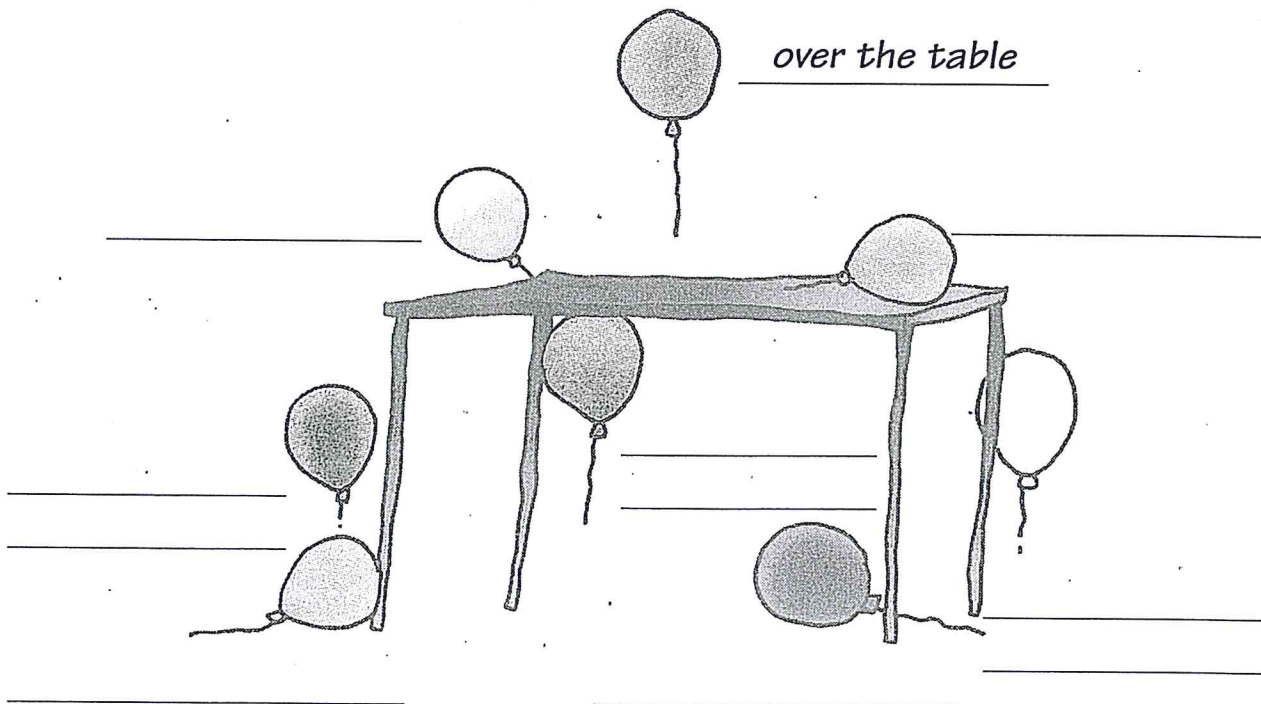
The big cat is **sitting by** the desk.

One cat is **under** it.



Directions

Write a prepositional phrase next to each balloon in this picture. Each phrase should tell where that balloon is located.





The Next Step Now write sentences using at least five of your prepositional phrases from the balloon picture on the previous page. Underline each prepositional phrase. The first sentence has been done for you.

1. *One balloon is floating above the table.*

2.

3.

4.

5.

6.

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Wednesday

3/18/20

Sentence Fragments 1

A **sentence fragment** is a group of words that looks like a sentence. It does not express a complete thought because important information is missing. (See *Write Source* page 436.)

Example

Fragment:

The Aztecs in what is now Mexico.
(A predicate is missing.)

Sentence:

The Aztecs **lived** in what is now Mexico.
(A predicate is added.)



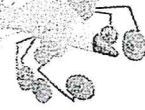
Directions

On each line below, put an "S" if the words that follow make a sentence. Put an "F" if they make a sentence fragment. The first one has been marked for you. (There are seven fragments.)

- S 1. They built cities during the 1200s.
2. Within their main city, parks and a zoo.
3. The Aztecs used chocolate as money.
4. Also traded with gold, copper, and cloth.
5. The Maya in Central America.
6. Built the tallest pyramid in the New World.
7. A kind of picture writing called hieroglyphics.
8. Wrote on bark paper.
9. The Incas lived in South America in the Andes mountains.
10. Built 12,000 miles of roads and huge buildings.

Colten

3/20/20

**Directions**

In the following paragraph, add the words from the list below to turn the fragments into complete sentences. Correct capitalization if necessary.

story was English lived
changed disagree Eskimos

- 1 For a long time, many people thought that Eskimos used
2 hundreds of words for "snow." Eskimos with a lot of snow, so the story
3 had to be true. New studies with that idea. Most people who study
4 languages now think that Eskimos have only 18 words for "snow." Has
5 about the same number. How did the get started? Some think that as
6 the story was told and retold, it. Things were added or left out. Lived
7 too far away. It impossible to easily check the truth of the story.

The Next Step For the fragments on page 87, add words to make them into complete sentences. The first one has been done for you. Complete your work on your own paper.

1. Explorers called the Inuit "Eskimos."

colten 3/23/20 Monday

Run-On Sentences 1

A **run-on sentence** happens when two sentences are joined without punctuation or a connecting word. (See *Write Source* page 437.)

Example

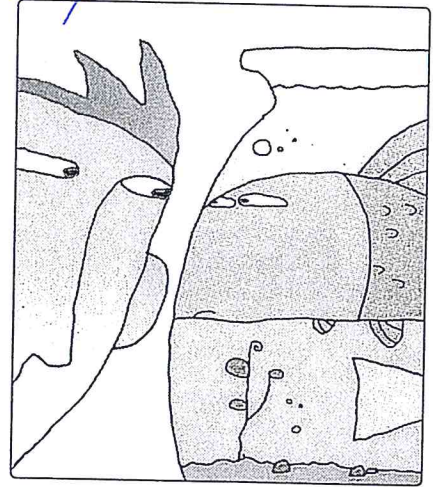
Run-On Sentence:

A fish never shuts its eyes it can't even blink.

Corrected Sentence:

A fish never shuts its eyes. It can't even blink.

(End punctuation and a capital letter make two sentences.)



Directions

Correct the run-on sentences below by dividing them into two sentences. Use correct capitalization and end punctuation in your new sentences. The first one has been done for you.

1. Earthworms have 10 hearts. ^Ssnails have eyes on stalks.
2. Grasshoppers can jump 30 inches that's like you jumping a football field.
3. Ants can lift 50 times their weight how much can you lift?
4. Squirrels bury more nuts than they dig up the nuts left in the ground sometimes grow into trees.
5. Birds' wings have feathers bats' wings are skin.
6. Camels drink as much as 30 gallons of water at one time no wonder they can cross deserts.
7. Kangaroo rats rarely drink water they get the water they need from the plants they eat.

Colten 3/25/20

Wednesday

Directions

Directions: Read the following paragraph and correct the run-on sentences. Be sure to use correct capitalization and punctuation where needed.

- 1 Crayfish live in streams and lakes lobsters live in the ocean.
2 Lobsters and crayfish belong to the same family of animals they are
3 not related to fish. Lobsters look like giant crayfish. Crayfish have
4 four pairs of legs and a set of pincers. If a pincer is broken off, the
5 crayfish will grow a new one the new pincer will be a lot smaller than
6 the old one. A crayfish has no bones the hard outer shell of the body
7 acts like a skeleton. The crayfish's tail flips quickly to move the animal
8 backward people are often surprised because they expect the animal to
9 move forward.

The Next Step Write a run-on sentence about animals. Exchange papers with a classmate and correct each other's run-on sentence by dividing it into separate sentences.

Run-On Sentence

Corrected Sentence

Colten

3/27/20

Friday

Run-On Sentences 2

In this activity, you'll practice correcting **run-on sentences** by adding a comma and a coordinating conjunction. Here are some conjunctions to choose from: *and*, *but*, *so*, and *yet*. (See *Write Source* page 437.)

Example

Run-On Sentence:

Panda bears live in China they eat bamboo.

Corrected Sentence:

Panda bears live in China, *and* they eat bamboo.



Directions

Correct the run-on sentences below by adding a comma and a conjunction. The first one has been done for you.

1. There are eight basic kinds of bears ^{and} the big brown bears are some of the largest bears in the world.
2. Sun bears are the smallest kind of bear they weigh 60 to 100 pounds.
3. Polar bears, a third kind, live in the Arctic they go swimming in very cold water.
4. Their thick fur keeps them warm their front paws work as paddles.
5. Grizzly bears, a fourth kind of bear, used to roam freely in the West now most of them live in national parks.
6. There are American black bears, Asiatic black bears, and spectacled bears don't forget the slow-moving sloth bears.

look in a book

Look in a Book—NOUNS ~~September 3/30/20~~ Week #2 - 4/3/20

Directions: Choose any book you like. As you read it, find the following types of nouns in your book. Then write them on the chart below. *Colton Monday*

Name of Your Book: _____

Author: _____

Your Name: _____ Date: _____

A noun is a person, place, or thing. Some nouns are considered "proper" when they refer to a specific person, place or thing. These nouns must be capitalized. Use the chart to list the nouns from your book.

Page Number	Common Nouns	Proper Nouns	Regular Plural Nouns	Possessive Nouns	Irregular Plural Nouns
	Ex. desk	Ex. America	Ex. desks	Ex. Kim's	Ex. leaves

look in a book



If your book doesn't have nouns to fill in each part of your chart, make up your own nouns. Instead of putting a page number on the nouns you provide, draw a smiley face ☺ instead.

Page Number	Common Nouns	Proper Nouns	Regular Plural Nouns	Possessive Nouns	Irregular Plural Nouns
	Ex. desk	Ex. America	Ex. desks	Ex. Kim's	Ex. leaves

Noun finder



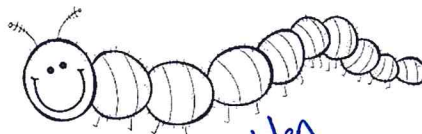
Name: _____

Date: _____

Directions: Underline the nouns in each sentence below. Each sentence has more than one noun.

- 1- Sunny shared his Transformer toys with his sister Lola.
- 2- The Triple Banana Split is my favorite ice cream from Dairy Queen.
- 3- Did you know that LeBron James scored 32 points in the game?
- 4- Meg and Mike visited their cousin Saran in Mongolia last summer.
- 5- I have not been bike riding in almost 2 years!
- 6- Hurricane Michael caused so much devastation for many families.
- 7- Our field trip to the museum in Atlanta, Georgia was my favorite trip.
- 8- Baelyn started a new Minecraft club, but it's for girls only.
- 9- Isaiah dyed his hair blue for the football game this Friday night.
- 10- I want to attend Howard University to study Journalism.

Name: _____



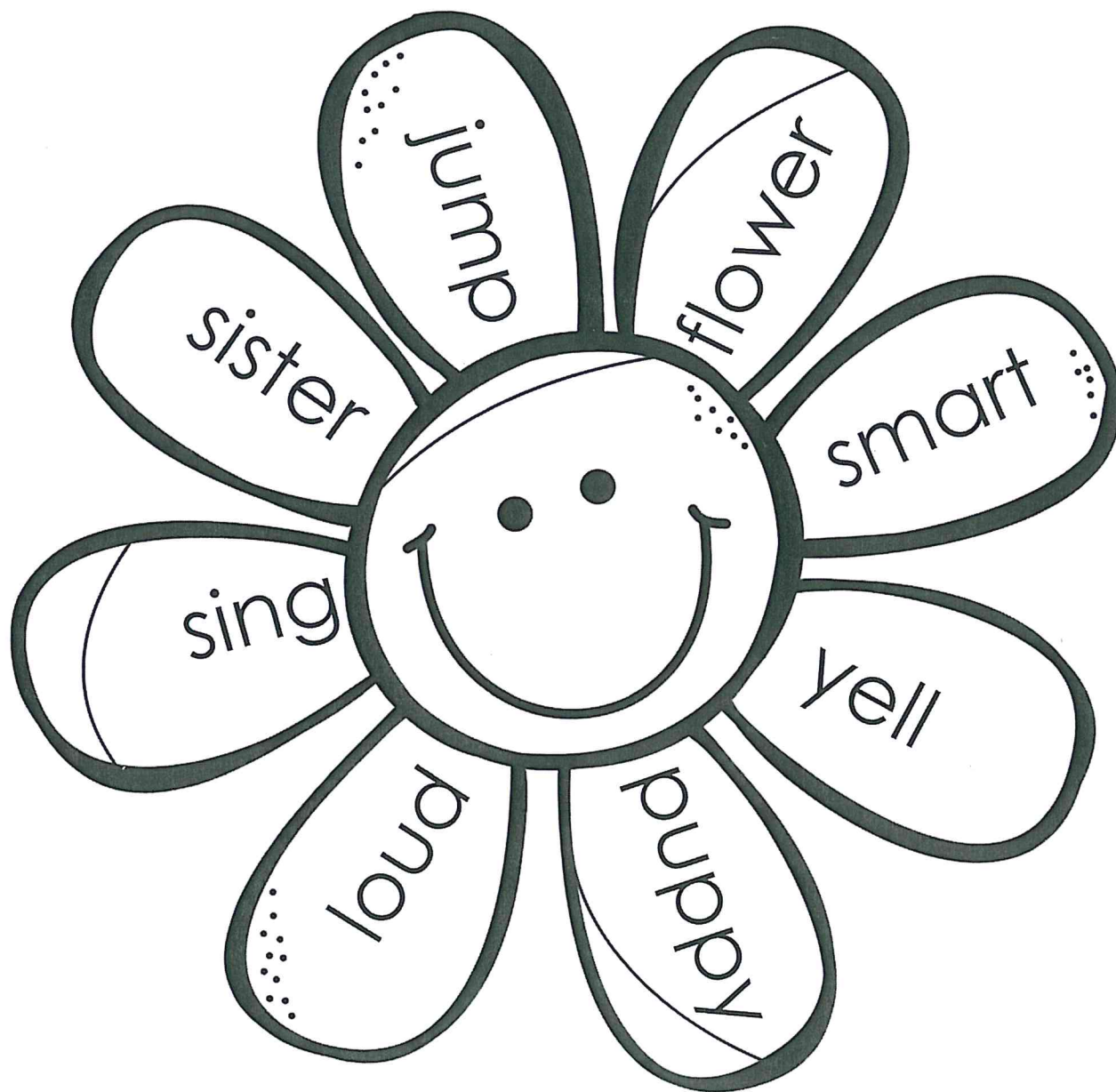
Colten
week #2

3/30/20 -
4/3/20

Tuesday

Directions:

1. Color the verbs blue.
2. Color the nouns red.
3. Color the adjectives yellow.



Name: _____

Directions:

1. Color the adjectives pink.
2. Color the adverbs blue.





FREEZE
Literacy
Center



Kayla Bloomstrand
ABCs with Mrs. B

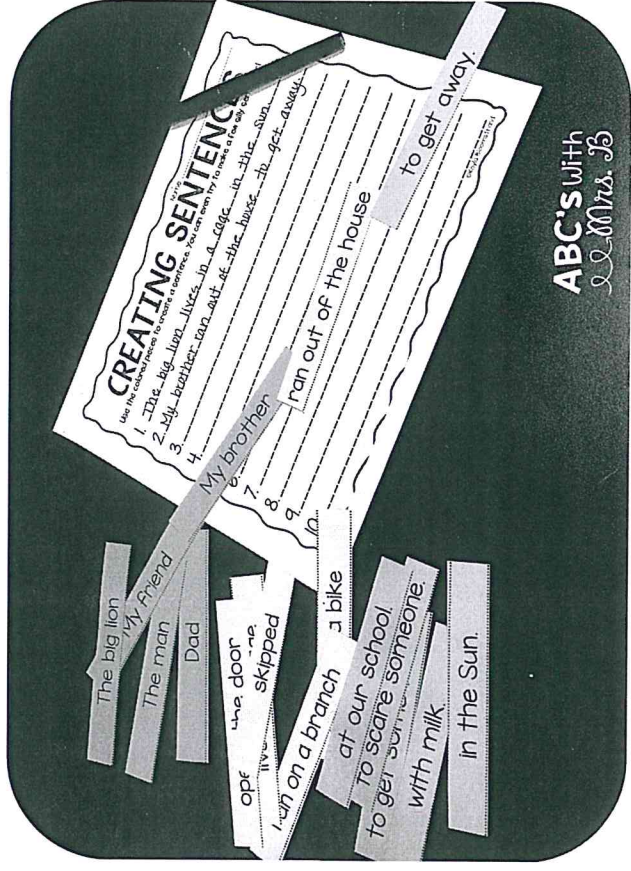
Colten
week #2
3/30/20-4/3/20
Wednesday

directions for use

PRINT EACH PAGE WITH SENTENCE PARTS ON DIFFERENT COLORS. CUT THEM INTO STRIPS PER THE DOTTED LINE.

STUDENTS WILL TAKE 3 STRIPS (ONE OF EACH COLOR) TO CREATE A SENTENCE. THE STUDENTS SHOULD READ THROUGH THE SENTENCE TO MAKE SURE IT MAKES SENSE AND SOUNDS RIGHT. STUDENTS WILL EVEN BE ABLE TO MAKE SOME SILLY SENTENCES.

AFTER THE STUDENTS HAVE CREATED THEIR SENTENCE, THEY CAN RECORD IN A NOTEBOOK OR ON THE RECORDING SHEET PROVIDED.



Dad

My brother

The big lion

My friend

The man

A squirrel

The woman

Mom

The bear

The horse

My teacher

The dog

The baby elephant

The little boy

The boat

The cat

The bird

The brown chair

The rug

The kid

opens the door

ran out of the house

lives in a cage

skipped

rides a bike

ran on a branch

looked outside

was in a hurry

catches fish

slept in the barn

loves the children

barked

waited

ate the cookie

sails the river

scratched the dog

flies quickly

is on the floor

got dirty

exercises

to let the dog out.

to catch the bus.

at the zoo.

to the store.

to get home.

to get the nut.

to watch birds.

to go to work.

in the river.

to stay warm.

at our school.

to scare someone.

to get some food.

with milk.

in the Sun.

to get away.

to his nest.

so I can sit down.

in the classroom.

to get strong.

BUILDING SENTENCES

USE THE COLORED PIECES TO CREATE A SENTENCE. YOU CAN EVEN TRY TO MAKE A FEW SILLY SENTENCES!

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

March

Name: _____

Date: _____

IDENTIFYING PARTS OF SPEECH

Directions: Correctly color each word according to its part of speech. If the word falls into more than one part of speech category, you may pick from one of those colors.

Nouns: Red

Adjectives: Blue

Verbs: Green

Adverbs: Yellow

Conjunctions: Purple

Prepositions: Orange



Thursday
colleen
week #
3/30/20
- 4/3/20

Name: _____

Directions:

Color the verbs green.
Color the nouns red.



wash



talk



bird



book

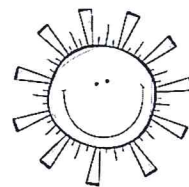


play



school

Name: _____



Directions:

Add an adjective to make each sentence more interesting.

Colleen

Friday
week #2
3/30/20-
4/3/20

Where is the _____ dog?

2. My sister has _____ hair.

3. My mom packed me a _____ lunch.

4. Wow, today was a _____ day!

5. Mr. Smith's new car is really _____.

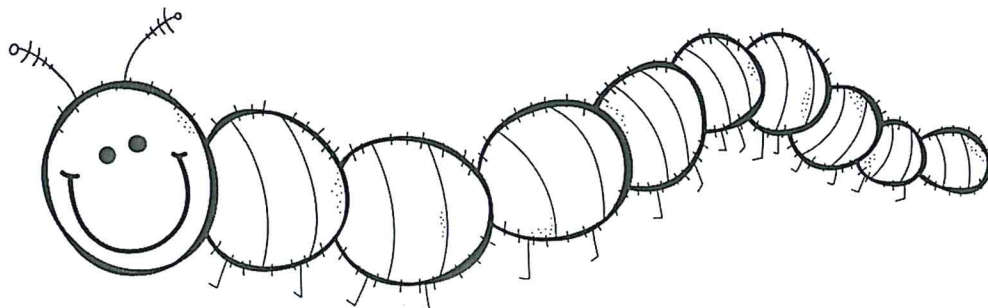
6. This ice cream is _____.

7. The monster is _____.

3. This is a _____ birthday cake.

7. The _____ flowers are blooming.

2. I just saw a _____ caterpillar.



Nouns

A noun is a person, place, or thing.

Person	Place	Thing
<ul style="list-style-type: none">• Mom• Dad• Sister• Brother• Teacher• Friend• Boss• Principal• Coach• Neighbor• Fireman• Princess• Prince• Grandma• Grandpa	<ul style="list-style-type: none">• School• Home• Store• Town• City• Camp• Theater• Gym• Alaska• Canada• Virginia• Desert• Arizona• Hall• Bedroom	<ul style="list-style-type: none">• Toy• Dog• Movie• Dish• Mouse• Cup• Story• Door• Bird• Bed• Pants• Spoon• Kitten• Crown• Phone

Verbs

A verb tells what someone or something can do.

- Walk
- Dance
- Play
- Annoy
- Run
- Fly
- Sing
- Clean
- Wash
- Scream
- Laugh
- Fight
- Flip
- Fall
- Tumble
- Cry
- Feel

- Sit
- Cook
- Bake
- Yell
- Kick
- Color
- Twist
- Shout
- Bend
- Write
- Read
- Win
- Travel
- Toss
- Throw
- Catch
- Clap

- Spit
- Argue
- Climb
- Hop
- Skip
- Wave
- Whisper
- Wander
- Type
- Tell
- Tattle
- Follow
- Listen
- Share
- Search
- Ignore
- Beg

Adverbs

An adverb tells more about a verb.

- Easily
- Angrily
- Happily
- Quickly
- Quietly
- Seriously
- Angrily
- Lazily
- Shyly
- Bravely
- Boldly
- Totally
- Barely
- Painfully
- Rarely
- Briskly

- Sternly
- Swiftly
- Nearly
- Often
- Nosily
- Noisily
- Bleakly
- Blindly
- Fairly
- Wrongly
- Yearly
- Sadly
- Happily
- Vaguely
- Vacantly
- Wisely

- Urgently
- Warmly
- Weakly
- Daintily
- Carefully
- Loosely
- Keenly
- Knowingly
- Politely
- Jealously
- Jumpily
- Rudely
- Readily
- Safely
- Bitterly
- Certainly

Adjectives

An adjective describes a noun.
(tells more about a person, place, or thing)

<ul style="list-style-type: none">• Loud• Quiet• Silly• Crazy• Smart• Pretty• Lovely• Radiant• Skinny• Small• Large• Round• Soft• Hard• Fuzzy• Funny• Mean	<ul style="list-style-type: none">• Sweet• Red• Purple• Green• Blue• Black• Striped• Spotted• Empty• Full• Friendly• Furious• Handy• Helpful• Harsh• Smelly• Stinky	<ul style="list-style-type: none">• Tired• Terrific• Terrified• Sour• Super• Amazing• White• Mopey• Excited• Sneaky• Insane• Fresh• Rotten• Sore• Bright• Dull• Colorful
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TOPIC 15

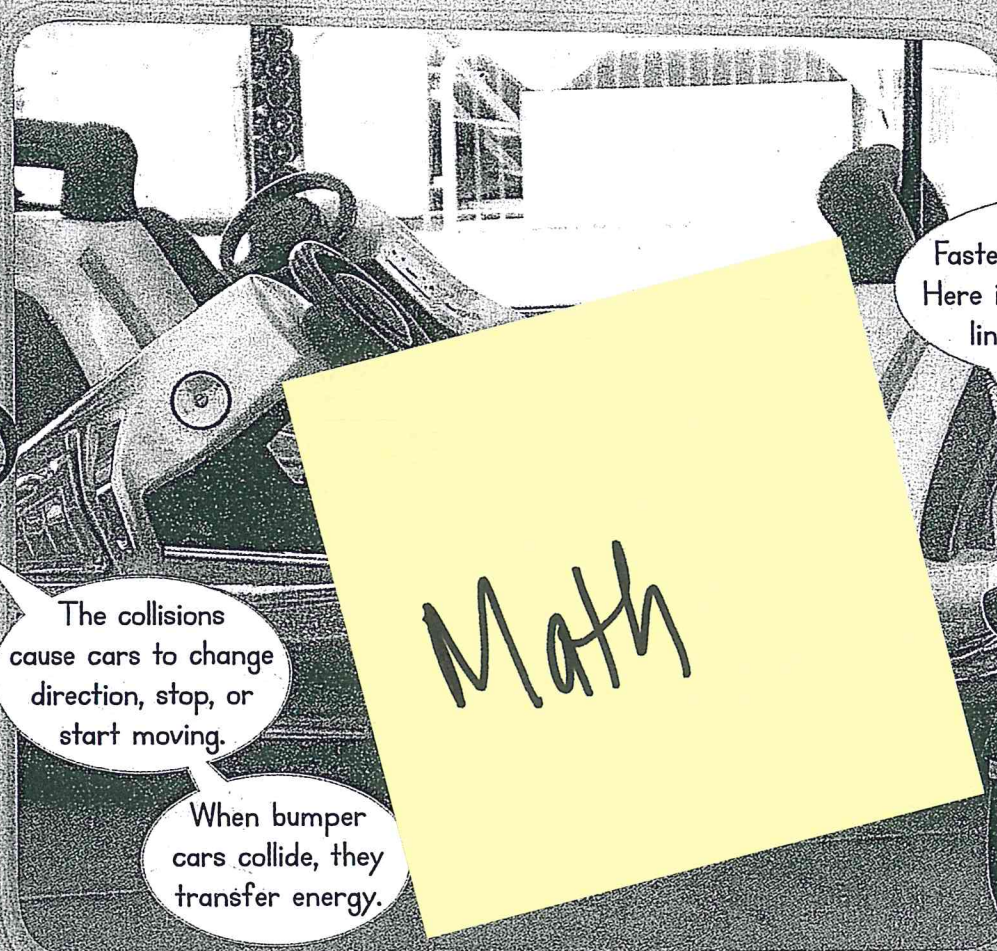
Geometric Measurement: Understand Concepts of Angles and Angle Measurement

Essential Questions: What are some common geometric terms?
How can you measure angles?

Digital Resources



Colleen
week #1
3/16/20
- 3/20/20



The collisions
cause cars to change
direction, stop, or
start moving.

When bumper
cars collide, they
transfer energy.

Fasten your seatbelts!
Here is a project about
lines and angles.

Math and Science Project: Lines and Angles

Do Research Use the Internet or other sources to research the area of the world's largest bumper car floor. Find where it is located and when it was built.

Journal: Write a Report Include what you found. Also in your report:

- Draw a diagram of a bumper car collision. Use an angle to show how a car might change direction after it collides with something. Measure and label the angle you drew.
- Describe your angle using some of the vocabulary terms on the My Word Cards.

Name _____

Review What You Know

Vocabulary

Choose the best term from the box.
Write it on the blank.

- angle
- right angle
- line
- sixth

1. A(n) _____ is one of 6 equal parts of a whole, written as $\frac{1}{6}$.
2. A(n) _____ is a figure formed by two rays that share the same endpoint.
3. A(n) _____ is an angle that forms a square corner.

Adding and Subtracting

Find the sum or difference.

4. $45 + 90$

5. $120 - 45$

6. $30 + 150$

7. $180 - 135$

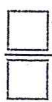
8. $60 + 120$

9. $90 - 45$

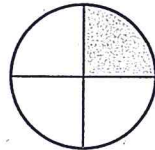
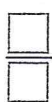
Parts of a Whole

Tell the fraction that represents the shaded part of the whole.

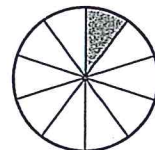
10.



11.



12.



Dividing

Find the quotient.

13. $360 \div 6$

14. $180 \div 9$

15. $360 \div 4$

Problem Solving

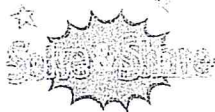
16. **Make Sense and Persevere** Gary has \$4. Mary has twice as many dollars as Gary. Larry has 4 fewer dollars than Mary. How much money do Gary, Mary, and Larry have in all?

Name _____



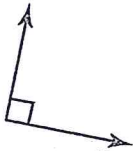
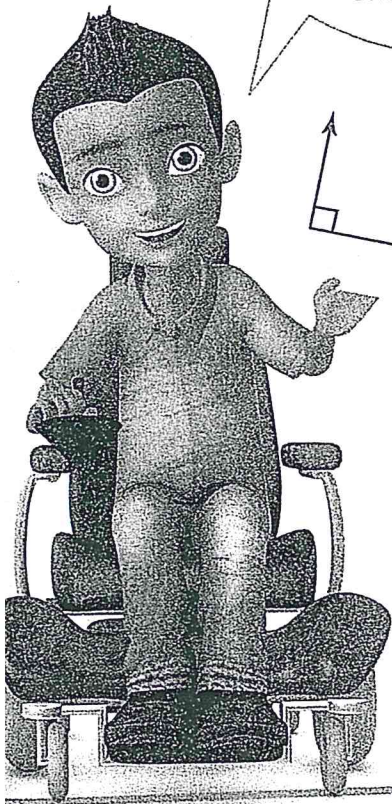
Lesson 15-1

Lines, Rays, and Angles



A right angle forms a square corner, like the one shown below. Draw two angles that are open less than the right angle. *Solve this problem any way you choose.*

You can use reasoning.
The closer the sides of an angle,
the smaller the angle measure.
*Show your work in the
space below!*



I can ...

recognize and draw lines, rays, and angles with different measures.

I can also reason about math.

Look Back! Reasoning Draw an angle that is open more than a right angle.

Point, line, line segment, ray, right angle, acute angle, obtuse angle, and straight angle are common geometric terms.

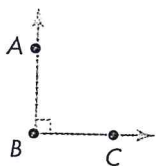


Lines and parts of lines are named their points. A ray is named with its endpoint first.

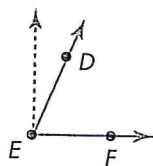
Geometric Term	Example	Label	What You Say
A point is an exact location in space.		Point Z	Point Z
A line is a straight path of points that goes on and on in opposite directions.		\overleftrightarrow{AB}	Line AB
A line segment is a part of a line with two endpoints.		\overline{GR}	Line Segment GR
A ray is a part of a line that has one endpoint and continues on forever in one direction.		\overrightarrow{NO}	Ray NO

B An angle is formed by two rays that have the same endpoint.

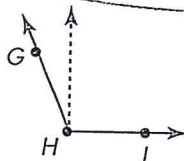
Angles are named with 3 letters. The shared endpoint of the rays is the center letter. The other letters represent points from each ray.



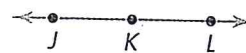
$\angle ABC$ is a right angle. A right angle forms a square corner.



$\angle DEF$ is an acute angle. An acute angle is open less than a right angle.

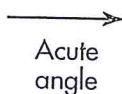
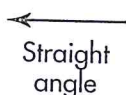
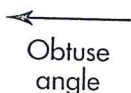


$\angle GHI$ is an obtuse angle. An obtuse angle is open more than a right angle but less than a straight angle.



$\angle JKL$ is a straight angle. A straight angle forms a straight line.

Convince Me! Look for Relationships Complete each figure to show the given angle.



★ Guided Practice ★

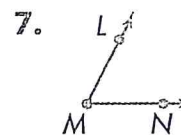
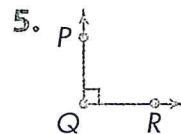


Do You Understand?

1. **Be Precise** What geometric term describes a part of a line that has one endpoint? Draw an example.
2. What geometric term describes a part of a line that has two endpoints? Draw an example.
3. Which geometric term describes an angle that forms a square corner? Draw an example.

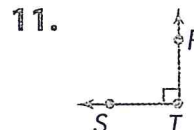
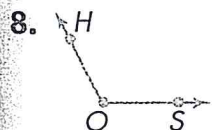
Do You Know How?

For 4–7, use geometric terms to describe what is shown.



★ Independent Practice ★

For 8–11, use geometric terms to describe what is shown.

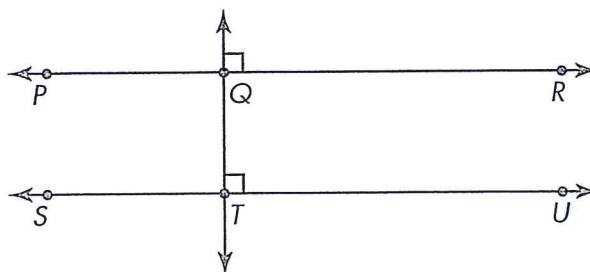


For 12–14, use the diagram at the right.

12. Name four line segments.

13. Name four rays.

14. Name 2 right angles.



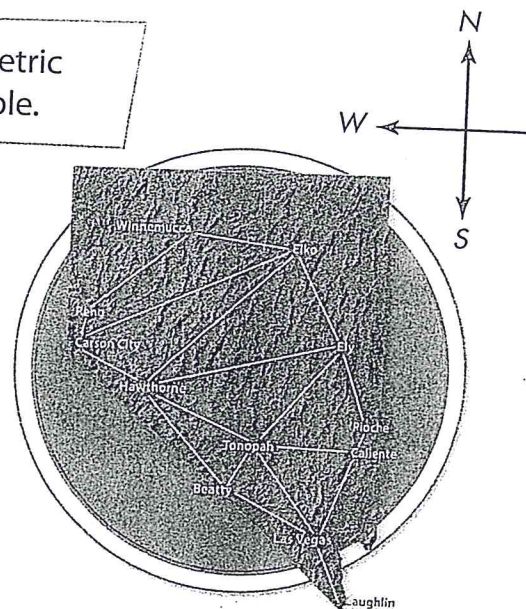
Problem Solving

For 15–17, use the map of Nevada. Write the geometric term that best fits each description. Draw an example.

15. **Be Precise** The route between 2 cities.

16. The cities

17. Where the north and west borders meet

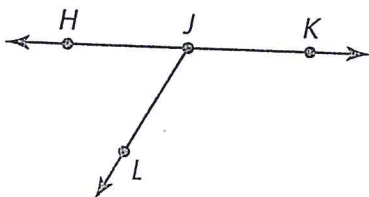


18. **Vocabulary** Write a definition for *right angle*. Draw a right angle. Give 3 examples of right angles in the classroom.

19. **Higher Order Thinking** Nina says she can make a right angle with an acute angle and an obtuse angle that have a common ray. Is Nina correct? Draw picture and explain.

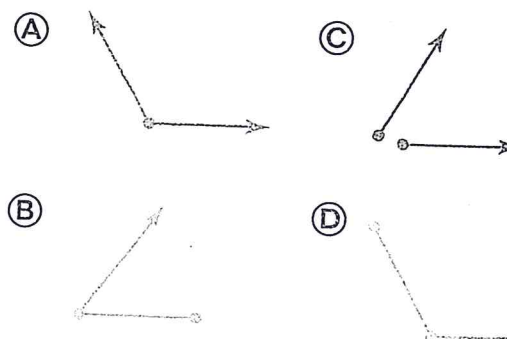
Assessment

20. Which geometric term describes $\angle HJK$?



- (A) Acute (C) Right
(B) Obtuse (D) Straight

21. Lisa drew 2 rays that share an endpoint. Which of the following is Lisa's drawing?



Another Look!

Here are some important geometric terms.



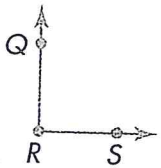
Homework & Practice 15-1

Lines, Rays, and Angles

• C

Point

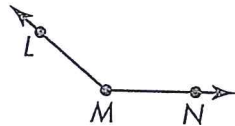
A point is an exact location in space. This is point C.

**Right angle**

A right angle forms a square corner. This is $\angle QRS$.

**Line**

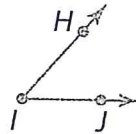
A line is a straight path of points that goes on and on in opposite directions. This is \overleftrightarrow{AB} .

**Obtuse angle**

An obtuse angle is greater than a right angle. This is $\angle LMN$.

**Line segment**

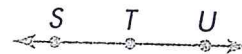
A line segment is part of a line. It has two endpoints. This is \overline{XY} .

**Acute angle**

An acute angle is less than a right angle. This is $\angle HIJ$.

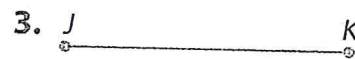
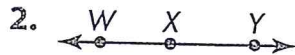
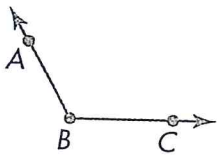
**Ray**

A ray is part of a line. It has one endpoint and goes on and on in one direction. This is \overrightarrow{AB} .

**Straight angle**

A straight angle forms a straight line. This is $\angle STU$.

For 1–3, use geometric terms to describe what is shown. Be as specific as possible.

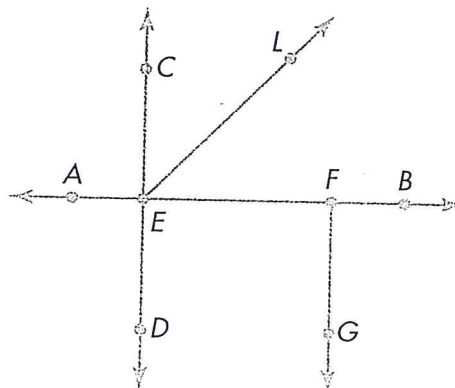


For 4–6, use the diagram at the right.

Name three different rays.

Name two different line segments.

Name two different acute angles.

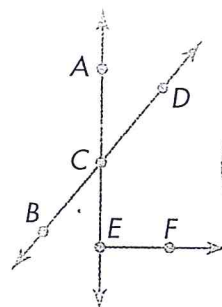


For 7–9, use the diagram at the right.

7. Name two lines.

8. Name two obtuse angles.

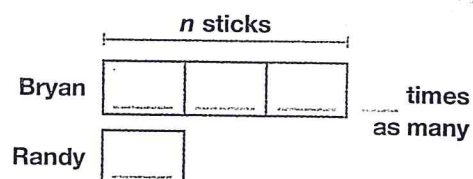
9. Name one point that lies on two lines.



There may be more than one name for the same geometric figure.

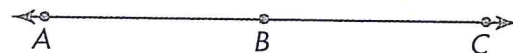


10. **Model with Math** Randy used 92 sticks to build a model. Bryan used 3 times as many sticks. Complete the bar diagram to represent how many sticks Bryan used. Then find how many more sticks Bryan used than Randy. Write and solve equations.



11. **Vocabulary** What is the difference between a *line* and a *line segment*? Draw an example of each.

12. **Higher Order Thinking** Name two rays with the same endpoint in the figure below. Do they form an angle? Explain.



Assessment

13. What is the name for the figure shown below?



- (A) Ray \overrightarrow{GH}
- (B) Line \overleftrightarrow{GH}
- (C) Line Segment \overline{HG}
- (D) Angle $\angle GH$

14. Mary drew \overleftrightarrow{XY} . Which of the following is Mary's drawing?

(A) $\circ X$

(B)

(C)

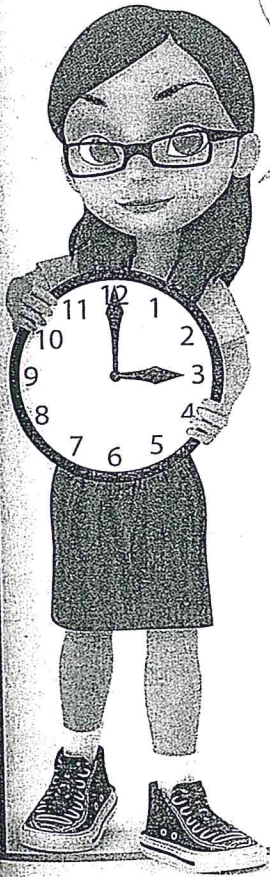
(D)

Name _____



If a clock shows it is 3 o'clock, how could you describe the smaller angle made by the two hands of the clock? *Solve this problem any way you choose.*

You can make sense of the problem by using what you know about acute, right, and obtuse angles. *Show your work in the space below!*



Lesson 15-2

Understand Angles and Unit Angles

I can ...

use what I know about fractions to measure angles.

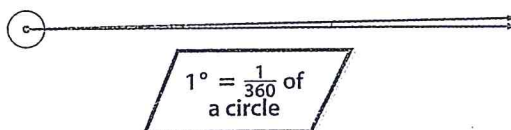
I can also make sense of problems.

Colten
Week # 2
~~3/20/20~~
3/20/20
- 4/3/20

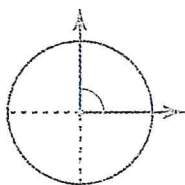
Look Back! Reasoning What two fractions do the hands divide the clock into?

An angle is measured with units called degrees. An angle that turns through $\frac{1}{360}$ of a circle is called a unit angle. How can you determine the angle measure of a right angle and the angles that turn through $\frac{1}{6}$ and $\frac{2}{6}$ of a circle?

An angle that measures 1° is a unit angle or one-degree angle.



B Divide to find the angle measure of a right angle.

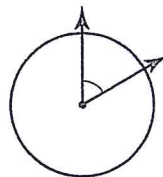


Right angles divide a circle into 4 equal parts.

$$360^\circ \div 4 = 90^\circ$$

The angle measure of a right angle is 90° .

C Multiply to find the measure of an angle that turns through $\frac{1}{6}$ of a circle.

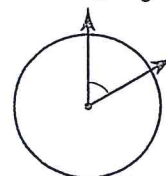


Multiply by $\frac{1}{6}$ to calculate the angle measure.

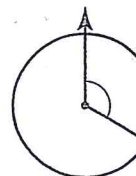
$$\frac{1}{6} \times 360^\circ = \frac{360^\circ}{6} \text{ or } 60^\circ$$

The angle measure is 60° .

D Add to find the measure of an angle that turns through $\frac{2}{6}$ of a circle.



$$\frac{1}{6} = 60^\circ$$



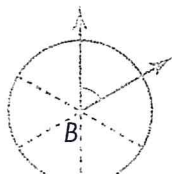
$$\frac{2}{6} = ?$$

Remember $\frac{2}{6} = \frac{1}{6} + \frac{1}{6}$. Add to calculate the measure of $\frac{2}{6}$ of a circle.

$$60^\circ + 60^\circ = 120^\circ$$

The angle measure of $\frac{2}{6}$ of a circle is 120° .

Convince Me! Critique Reasoning Susan thinks the measure of angle B is greater than the measure of angle A . Do you agree? Explain.



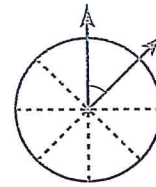
Another Example!

Find the fraction of a circle that an angle with a measure of 45° turns through.

A 45° angle turns through $\frac{45}{360}$ of a circle.

$45^\circ \times 8 = 360^\circ$, so 45° is $\frac{1}{8}$ of 360° .

One 45° angle is $\frac{1}{8}$ of a circle.



$45^\circ = \frac{1}{8}$ of a 360° circle

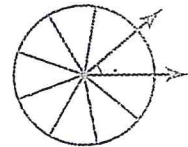
★ Guided Practice ★

Do You Understand?

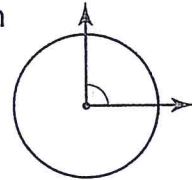
1. What fraction of the circle does a 120° angle turn through?
2. **Model with Math** Mike cuts a pie into 4 equal pieces. What is the angle measure of each piece? Write and solve an equation.

Do You Know How?

3. A circle is divided into 9 equal parts. What is the angle measure of one of those parts?



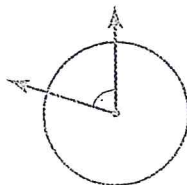
4. An angle turns through $\frac{2}{8}$ of the circle. What is the measure of this angle?



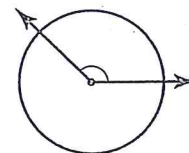
★ Independent Practice ★

For 5–8, find the measure of each angle.

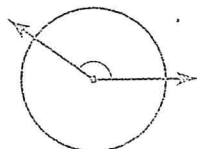
5. The angle turns through $\frac{1}{5}$ of the circle.



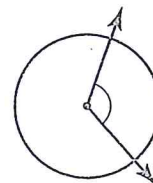
6. The angle turns through $\frac{3}{8}$ of the circle.



7. The angle turns through $\frac{2}{5}$ of the circle.



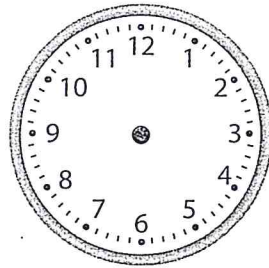
8. The angle turns through $\frac{2}{6}$ of the circle.



Problem Solving

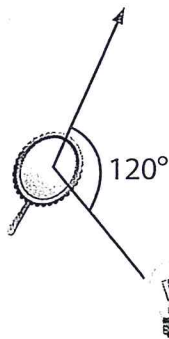
9. **Reasoning** Use the clock to find the measure of the smaller angle formed by the hands at each time.

- a. 3:00
- b. 11:00
- c. 2:00



10. **Algebra** Jacey wrote an equation to find an angle measure. What do the variables a and b represent in Jacey's equation? $360^\circ \div a = b$

11. **Math and Science** A mirror can be used to reflect a beam of light at an angle. What fraction of a circle would the angle shown turn through?



12. Malik paid \$32.37 for three books. One book cost \$16.59. The second book cost \$4.27. How much did the third book cost? Use bills and coins to solve.

\$32.37		
\$16.59	\$4.27	b

13. **Make Sense and Persevere** A pie was cut into equal parts. Four pieces of the pie were eaten. The 5 pieces that remained created an angle that measured 200° . What was the angle measure of one piece of pie?

14. **Higher Order Thinking** Jake cut a round gelatin dessert into 8 equal pieces. Five of the pieces were eaten. What is the angle measure of the dessert that was left?

Assessment

15. Draw a line from the time to the smaller angle the time would show on a clock. Use the clock to help.

3:00

180°

10:00

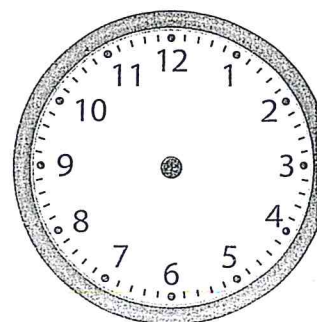
60°

6:00

120°

4:00

90°



Name _____



Help



Practice
Buddy



Tools



Games

Homework & Practice 15-2

Understand Angles and Unit Angles

Another Look!

You can find the measure of an angle using fractions of a circle.

The angle shown is $\frac{2}{5}$ of a circle.

What is the measure of this angle?

Remember that $\frac{2}{5} = \frac{1}{5} + \frac{1}{5}$.

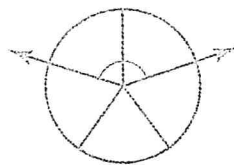
Divide to find the angle measure of $\frac{1}{5}$ of a circle.

$$360^\circ \div 5 = 72^\circ$$

An angle that turns through $\frac{1}{5}$ of a circle measures 72° .

$$72^\circ + 72^\circ = 144^\circ$$

The measure of this angle is 144° .

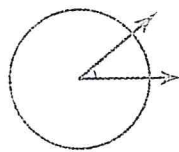


Fractions of a circle can help with the understanding of angle measures.



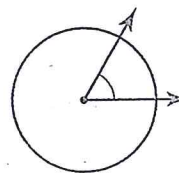
For 1–4, find the measure of each angle.

1. The angle turns through $\frac{1}{9}$ of the circle.



2. A circle is divided into 6 equal parts. What is the total angle measure of 1 part?

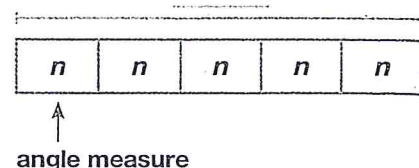
$$\frac{1}{6} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



3. A circle is divided into 5 equal parts. What is the total angle measure of 4 parts?

4. A circle is divided into 8 equal parts. What is the total angle measure of 4 parts?

5. **Reasoning** Noah used a bar diagram to find the measure of an angle that turns through $\frac{1}{5}$ of a circle. Write an equation to find the measure of the angle.



6. **Number Sense** Miguel cut $\frac{1}{4}$ from a round pie. Mariah cut a piece from the same pie with an angle measure of 60° . Who cut the larger piece? Explain.

7. **Construct Arguments** Janie served 4 same-size pizzas at the class party. Explain how to find how many slices of pizza Janie served if the angle for each slice turns through a right angle.

8. Wendy's older brother is buying a car. He can make 24 payments of \$95 or 30 payments of \$80 each. Which costs less? How much less?

9. **Higher Order Thinking** A circle is divided into 18 equal parts. How many degrees is the angle measure for each part? How many degrees is the angle measure for 5 of those parts? Break apart 18 to solve. Explain.

✓ Assessment

10. Draw a line to match the angle in the circle with its angle measure.

