# Week of April 6th Activities

Hi wonderful students!

Below you will find your home-based activities for the week of April 6th. Please don't forget to turn your work into your teacher by scanning and emailing, or returning it next Monday when you pick up a new packet. See you soon!

| | |
|---|---|
| **Monday** | Choose one!<br>· ***Angle Scavenger Hunt*** Can you locate the three types of angles around your own house? Find 5 examples of an obtuse angle, a right angle and an acute angle around your house. Write these down on a piece of paper and return them with your packet.<br>· ***Toss and Talk*** You will need a partner, the worksheet provided and number tiles for the numbers 0-9 (or 10 small pieces of paper with the numbers 0-9 written on them). Place the numbers in a bag (or cup or anything that you can pull them out of). Pick a tile and find the angle your tile matches. Use the protractor to find the measurement of your angle, and match it to the measurement at the bottom. Put your number on the degrees of the measurement it matches. |
| **Tuesday** | · ***Secret Code Math*** What do ducks eat for a snack? Find out by finding the measurement of each on each protractor and decoding the answer! |
| **Wednesday** | Choose one!<br>· ***Guess my Angle!*** Using a protractor (if you have one), draw an angle on a piece of paper. Write the type of angle (right, acute or obtuse) and the angle's measurement in degrees. Describe this angle to your partner without telling them the measurement of the angle! You can tell them what numbers the rays intersect, what type of angle it is, and explain to them how you drew it.<br>· ***Angle Tic-Tac-Toe*** Draw a tic-tac-toe game board on a piece of paper. Cut out the adjacent angles problems from the attached page (The 12 problems that have two angles connected). Lay them face down in one pile. Partner 1 pulls the top card and solves for the unknown angle. Partner 2 checks their work. If they are correct, they get to put an X or O on their game board. Next, Partner 2 chooses a card and solves the problem. Partner 1 then checks their answer. Continue this pattern until someone gets a Tic-Tac-Toe! |
| **Thursday** | · HMH Lesson "14.5 Unknown Angle Measures". |
| **Friday** | · Free Choice! You can complete any unfinished work, play fact fluency games, or even play Prodigy! 😊 |

# Week of April 6th Activities

## Science:

*Monday:* Read through the two paragraphs. Fill in the blanks as you go with the correct word from the word bank and draw a picture when asked.

- Some key vocabulary words have been provided for you along with their definitions.

*Tuesday:* For this one you have two options: You may pick to either….

A. Complete the word search

OR

B. Use a piece of notebook paper to complete a home survey answering the following questions

1) What kind of energy heats our home in winter?
2) What kind of energy cools our home in summer?
3) What kind of energy cooks our food?
4) What kind of energy heats our water?
5) What kind of energy runs our cars?
6) What kind of energy powers our lights and our appliances?
7) What kinds of things do we recycle?
8) How do we waste energy?
9) How do we save energy?
10) What things can we do to save more energy?

***Credit for fill in the blanks: Stem Scopes**

## Social Studies:

This week you will ONLY have 1 assignment. This assignment has 2 PARTS.

*Wednesday – Part 1:* You will choose between 3 famous Cattlemen and conduct research on their contribution to the cattle industry. Use the attached research sheet to guide your research.

- Pick ONE of the 3 Cattleman:
  1. Charles Goodnight
  2. Richard King
  3. Lizzie Johnson

*Thursday – Part 2:* You will create an advertisement for the cattleman you chose! It can be in the form of a billboard, poster, or a brochure.

- Pretend that your cattleman is alive today and is campaigning against the others to be elected as, "The World's Best Cattleman."
- Create an advertisement that illustrates WHY the cattleman you chose should be considered the "The World's Best Cattleman."
  - Be sure to include:
    - Their contributions to the cattle industry (what makes them so special)
    - A catchy slogan for their campaign
    - Creative drawings that capture why they are famous

***Credit for creating the research sheet goes to: ©2014TeachingInTheFastLaneLLC4**

# Week of April 6th Activities

# MATH

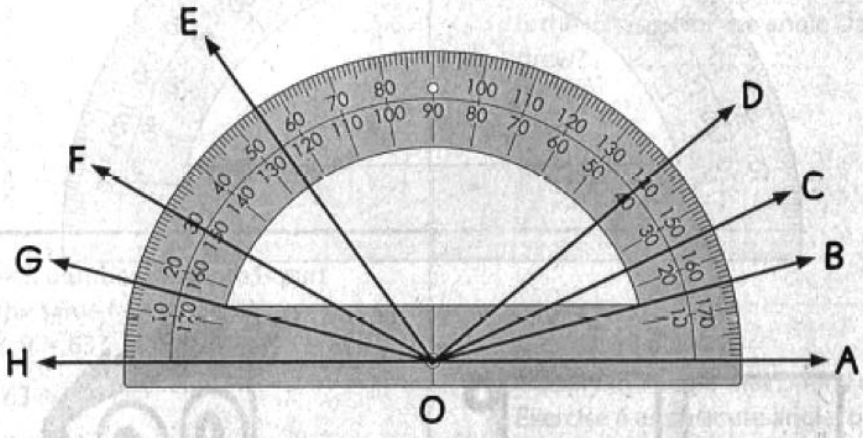
## Teamwork

Partner Talk
Share your thinking while you work.

**Get Started** (1 or 2)
Put 0 1 2 3 4 5 6 7 8 9 in a bag.

**Repeat for Each Round**
Pick a tile. Take turns. Read the name of the angle next to your number.
Trace that angle on the protractor. Find the measure of that angle.
Use your tile to cover the answer.

| | | | | |
|---|---|---|---|---|
| 0 ∠AOD | 1 ∠HOF | 2 ∠AOB | 3 ∠AOE | 4 ∠HOG |
| 5 ∠HOE | 6 ∠AOF | 7 ∠AOG | 8 ∠HOD | 9 ∠AOC |

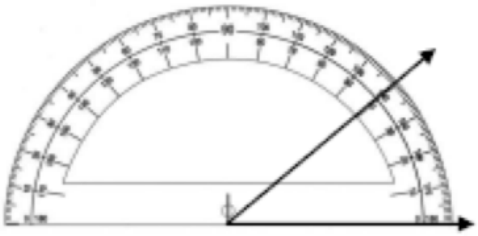



| | | | | |
|---|---|---|---|---|
| 15° | 150° | 30° | 140° | 25° |
| 15° | 165° | 40° | 125° | 55° |

**If you have more time**
Use your finger to trace a different angle on the protractor.
Ask your partner to find the measure of that angle.

# Week of April 6th Activities

## What do ducks eat for a snack?



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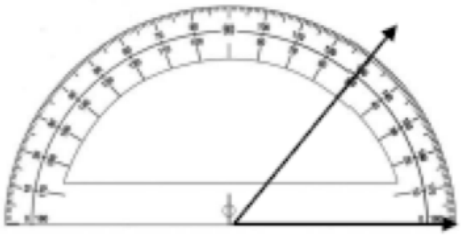

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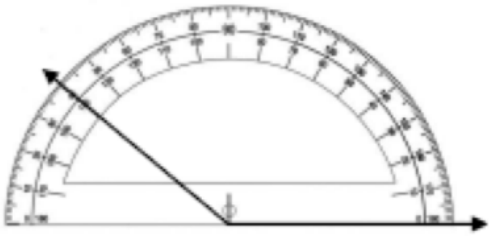

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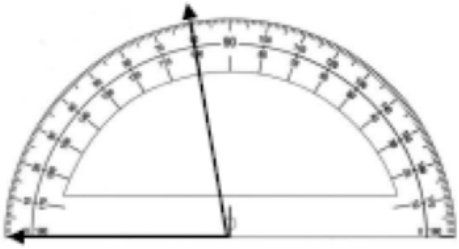

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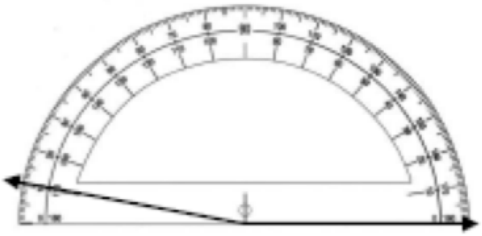

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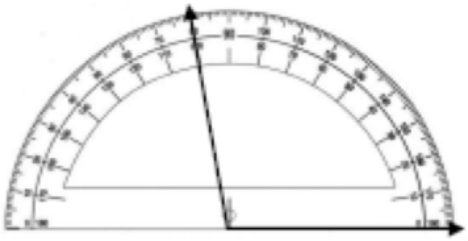

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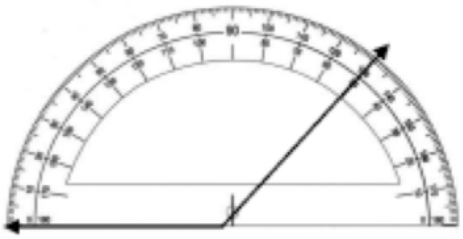

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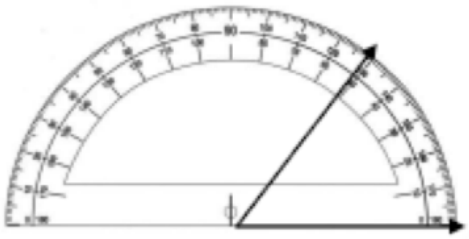

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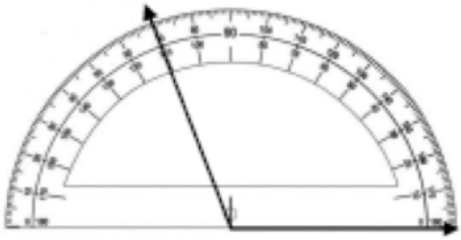

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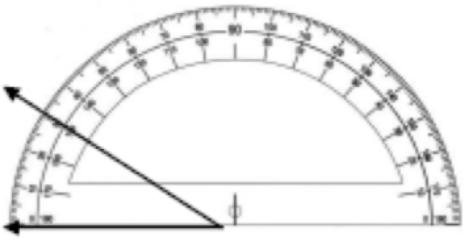

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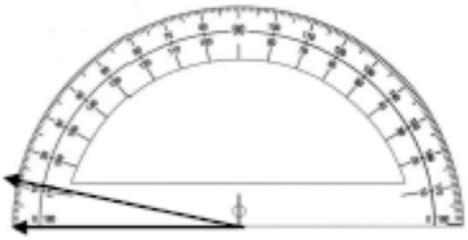

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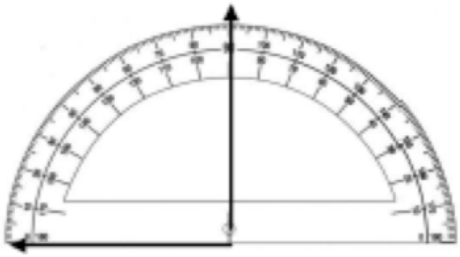


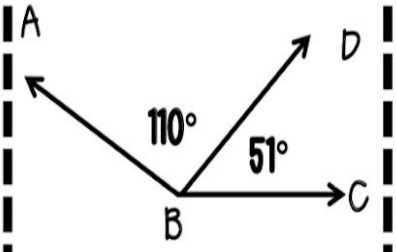
_____ S

*Using the protractors, measure the degrees of each angle above. Write the angle measure on the line provided. Place the letter next to the line on the space provided below. When you are finished, you will have the answer to the riddle!*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 31° | 110° | 170° | 140° | 80° | 130° | 40° | 90° |

# Week of April 6th Activities

**1**

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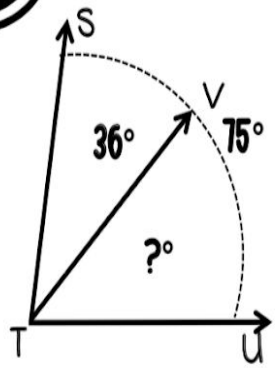


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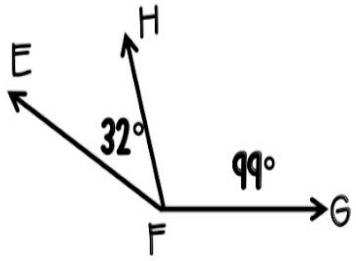


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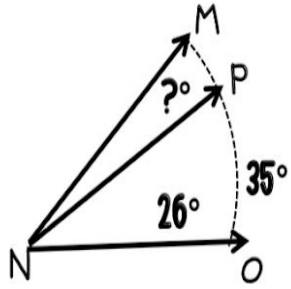


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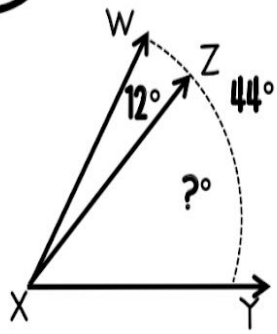


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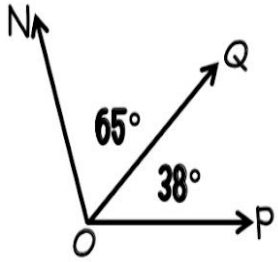


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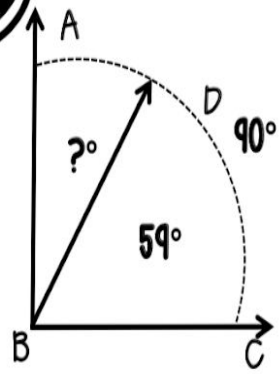


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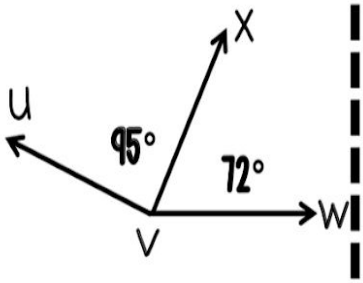


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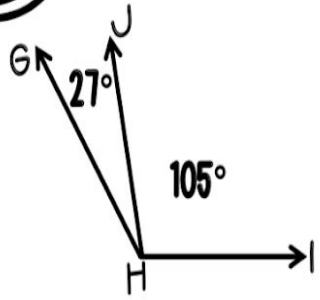


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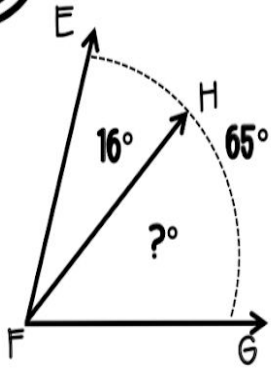


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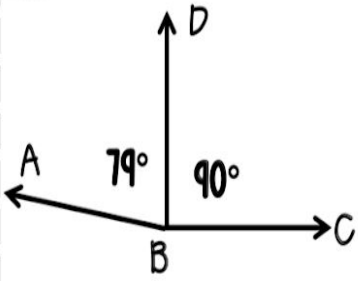


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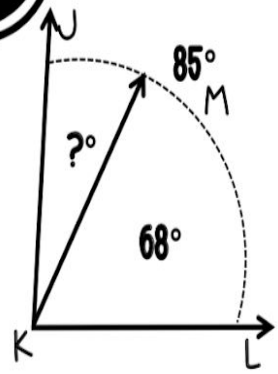


Name _____

# 14.5 PROBLEM SOLVING • Unknown Angle Measures

TEKS Geometry and Measurement—4.7.E

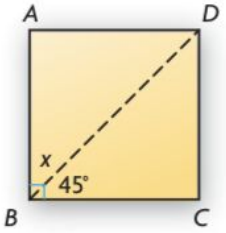
MATHEMATICAL PROCESSES 4.1.A, 4.1.B, 4.1.E

**Essential Question** How can you use the strategy *draw a diagram* to solve angle measurement problems?

## Unlock the Problem

Mr. Tran is cutting a piece of kitchen tile as shown at the right. He needs tiles with 45° angles to make a design. After the cut, what is the angle measure of the part left over? Can Mr. Tran use both pieces in the design?

Use the graphic organizer below to solve the problem.




### Read

**What do I need to find?**

I need to find

_____

_____

**What information am I given?**

I can use the measures of the angles I know.

_____

_____

### Plan

**What is my plan or strategy?**

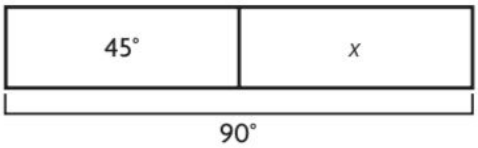
I can draw a strip diagram and use the information to

_____

_____

### Solve

I can draw a strip diagram to represent the problem. Then I can write an equation to solve the problem.




$m\angle ABD + m\angle CBD = m\angle ABC$

$x +$ _____ $=$ _____

$x =$ _____

The $m\angle ABD =$ _____.

Since both tiles measure _____, Mr. Tran can use both pieces in the design.

**Math Talk**

Mathematical Processes

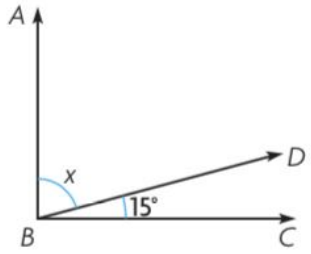
What other equation can you write to solve the problem? Explain.

## Lesson Check

TEXAS Test Prep

**Fill in the bubble completely to show your answer.**

**7.** What is the measure of the unknown angle *ABD*? Angle *ABC* is a right angle.



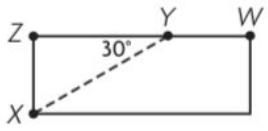

Ⓐ 80°

Ⓑ 105°

Ⓒ 165°

Ⓓ 75°

**8.** Carol cut a triangle out of a rectangular tile to make a mosaic.




What is the measure of angle *XYW* in the piece leftover?

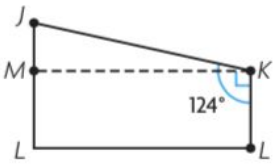
Ⓐ 180°

Ⓑ 45°

Ⓒ 150°

Ⓓ 60°

**9.** Jason wants to add a fence to his yard to make it the shape of a rectangle.




What is the measure of angle *MKJ* in the portion of the yard not inside the fence?

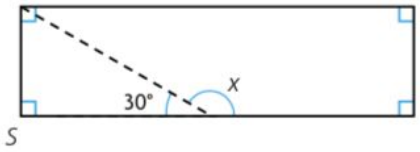
Ⓐ 34°

Ⓑ 146°

Ⓒ 56°

Ⓓ 90°

**10.** What is the measure of the unknown angle in the figure?




Ⓐ 90°

Ⓑ 150°

Ⓒ 60°

Ⓓ 180°

**11.** **Multi-Step** Two angles join to form a right angle. The measure of one of the angles is 64°. What is the measure of the other angle?

Ⓐ 116°

Ⓑ 26°

Ⓒ 90°

Ⓓ 36°

**12.** **Multi-Step** Three angles join to form a straight angle. One angle measures 45°. Another angle measures 50°. What is the measure of the third angle?

Ⓐ 85°

Ⓑ 95°

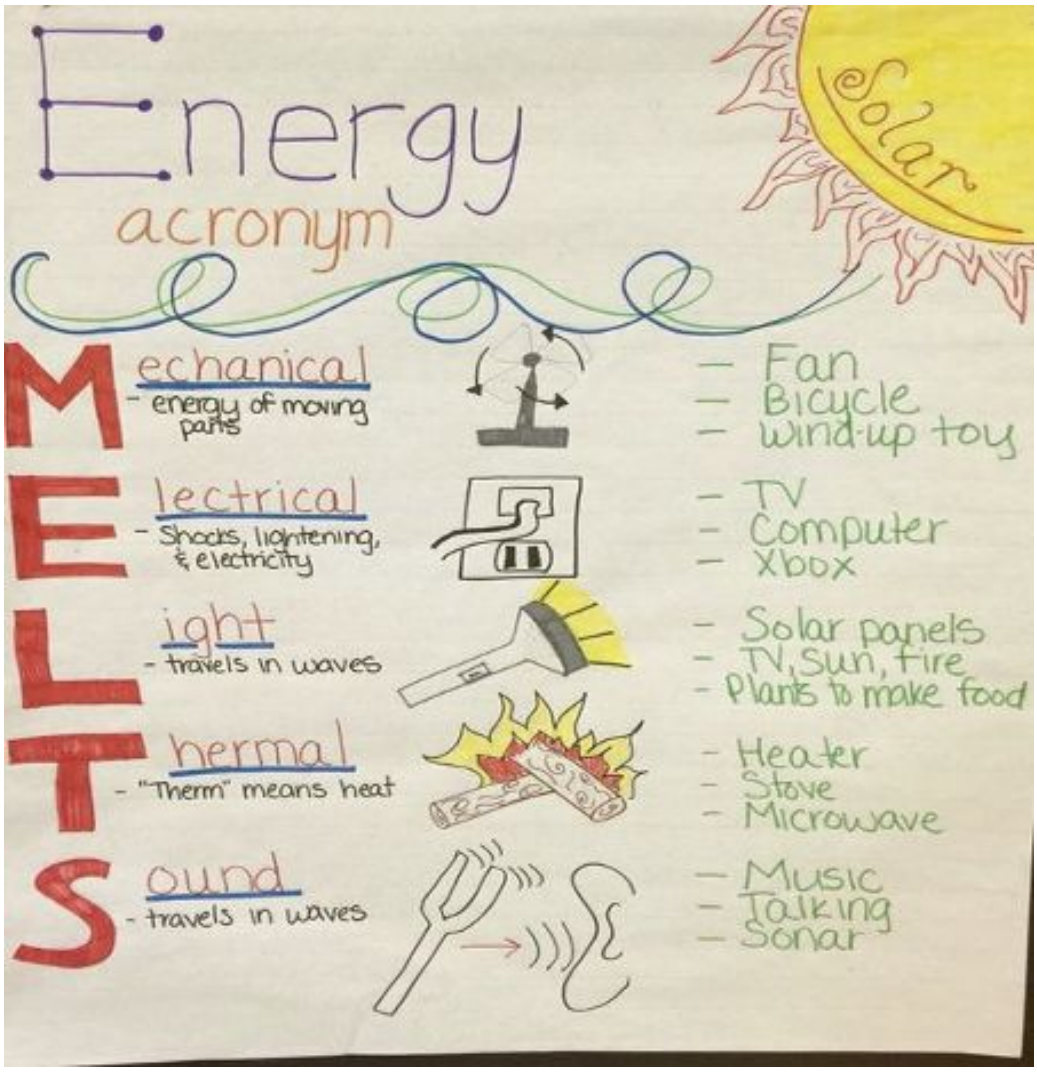
Ⓒ 130°

Ⓓ 100°

# Week of April 6th Activities

## Energy Vocabulary

- Energy - the ability to cause change or movement in matter
- Kinetic energy - energy in use or motion
- Potential energy - energy an object has because of it position or condition
- Mechanical energy - energy of motion that causes work
- Electrical energy - a form of energy that comes from electricity used to produce heat, light, or sound
- Sound energy - energy that travels in the form of waves made from the vibrations of matter
- Light energy - a form of energy that travels in straight lines and can be seen with the eye
- Thermal energy - a form of energy formed from moving particles; also called heat energy
- Insulator - a substance that does not transfer energy easily
- Conductor - a substance that transfers energy easily
- Reflection - light rays bouncing off a surface
- Refraction - bending of light rays as they pass through a substance
- Electricity - a form of energy produced by the movement of electrons
- Electromagnet - a magnet created from the flow of electrical currents through a wire coil wrapped around an iron or steel core.



# Week of April 6th Activities

**Key Concept 1: There are different forms of energy, including mechanical, sound, electrical, light, and thermal.**

Passage: Use the words from the word bank to fill in the blanks in the passage below. Some of the words may not be used.

Energy exists in different forms, including light, thermal, mechanical, sound, and electrical energy. Light energy travels through space and allows us to see things by _____ off objects. Thermal energy can be added or taken away by increasing or decreasing the amount of _____. Mechanical energy is the energy of _____. Sound energy can be heard due to the _____ of molecules. Electrical energy involves the movement of charged particles through a _____.

Word Bank

| | | |
|---|---|---|
| Vibrations | Movement | Circuit |
| Reflecting | Heat | Light |

Illustrate and label an example of each energy form from the paragraph above.

**Key Concept 2: We can observe and differentiate forms of energy. Light bulbs, toasters, fans, and televisions are common, everyday objects that produce or use light, thermal, mechanical, sound, and electrical energy.**

Passage: Use the words from the word bank to fill in the blanks in the passage below. Some of the words may not be used.

Appliances can use several _____ of energy at once. A laptop computer requires a plug to keep it charged. This is an example of _____ energy. Once the power is turned on, the computer emits a soft glow, or _____ energy, so you can see. _____ energy is produced, which causes the bottom of the computer to feel very warm. A fan within the computer turns on to blow the heat off the internal parts of the computer. This is an example of _____ energy. And of course, if we want to listen to a video or music on the computer, _____ energy must exist!

Word Bank

| | | |
|---|---|---|
| Mechanical | Light | Electrical |
| Sound | Thermal | Types |

Illustrate an appliance (different from above), and label the forms of energy it uses and produces as it is used.

Week of April 6th Activities

# Forms of Energy Crossword

**Word Bank**

- -mechanical energy
- -electrical energy
- -light energy
- -thermal energy
- -sound energy
- -energy
- -solar panel
- -toaster
- -radio
- -work

**Down**

1. energy that is related to heat (the energy of moving particles in a substance)
2. energy that is caused by vibrations
3. energy that is related to motion/ moving parts
4. energy that can be sensed by the eye
5. what is needed to do work or cause change
6. uses light energy and can produce electrical energy

**Across**

1. energy resulting from the flow of charged particles
2. the ability to move things, change things, or heat things
3. uses electrical energy and can produce thermal, mechanical, light and sound energy
4. uses electrical energy and can produce sound energy

Week of April 6th Activities

# Social Studies

## FAMOUS CATTLEMAN RESEARCH SHEET

I am researching _____.
He/She was born in _____ on _____ and died in _____ on _____.
They are famous because_____
_____
_____
_____.
Their impact is _____
_____
_____
_____
Three important facts are:
1.
_____
_____
2.
_____
_____
3.
_____
_____