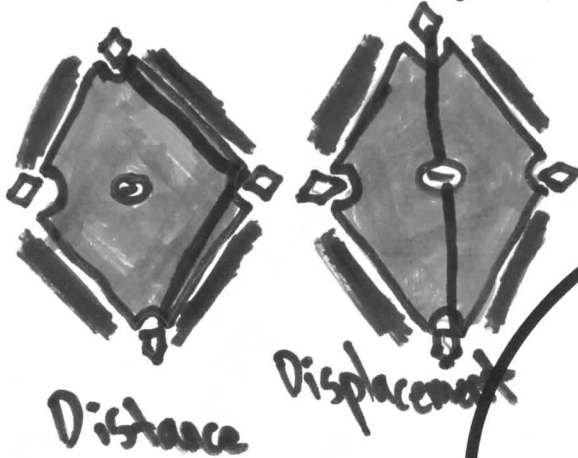


Exit Slips

Draw It!

Ka Shayan, &
Robert Tiss

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

distance: the length of a path

displacement: the shortest route from point to point

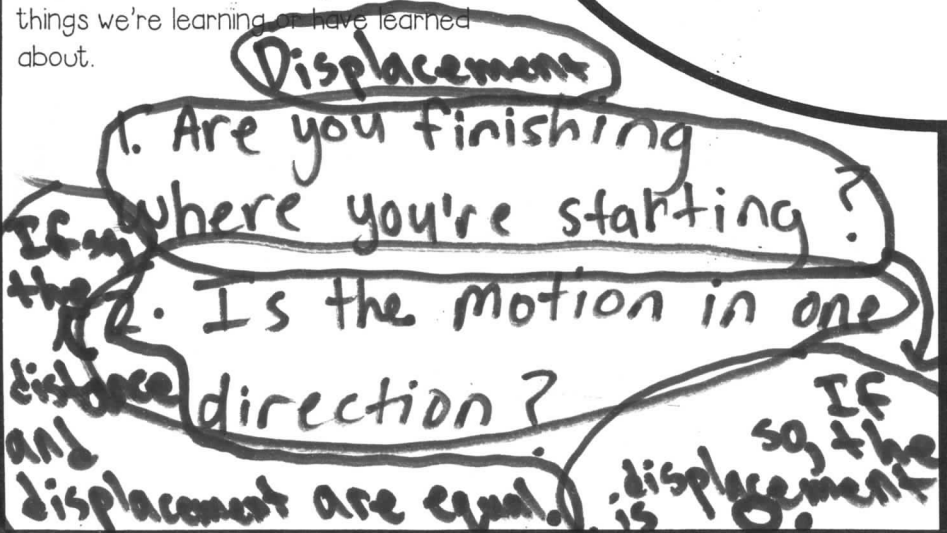
List It!

List as many key terms and phrases related to our current unit as you can.

distance and displacement

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

1. What is the displacement from home plate to first base on a single?
2. What is the displacement from home plate to home plate on a home run?

Alex Patten, Jack Duffy
James Rizzo Chris Dilopi

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

A position is an object's distance and direction from a reference point.

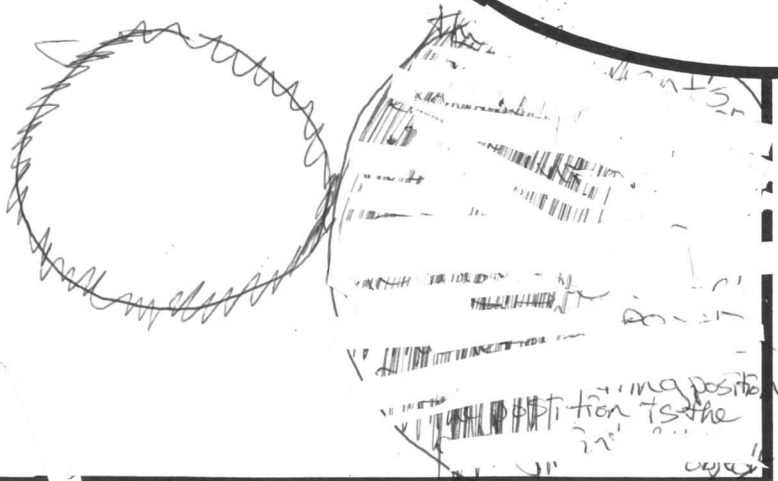
List It!

List as many key terms and phrases related to our current unit as you can.

Position

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

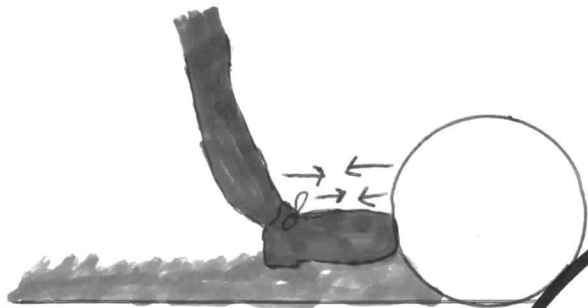
Write 2 thoughtful questions related to what we're currently learning.

ch. 1
How do you find the position of something going in different directions?
How do you find the ~~the~~ position of something that is 3D?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



The man is kicking the ball both exert force on each other

Write It!

Write 2 statements about what you're learning

For every action there is an equal and opposite reaction.
when you exert a force on an object the object will exert an equal force on you.

List It!

List as many key terms and phrases related to our current unit as you can.

NEWTON'S 3rd

LAW

(N.2)

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.

Force pair
opposite children (good vs. Bad)
action reaction
up down
right left

Question It!

Write 2 thoughtful questions related to what we're currently learning.

- Action and reaction is considered
A. Force pairs B. Atmosphere C. Energy
- If a swimmer pushes the water back, what does the water do?
A. condense B. push forward C. not do anything

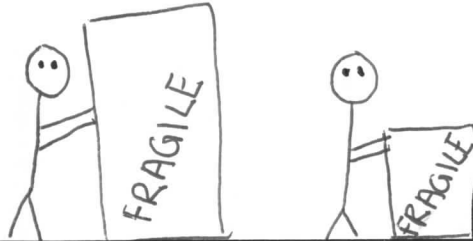


Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.

The greater the mass the harder it is to move, smaller mass is easier to move



Write It!

Write 2 statements about what you're learning

- Acceleration of an object is equal to the net force acting on the object divided by the objects mass

$$- A = \frac{F(\text{net force})}{m(\text{mass})}$$

List It!

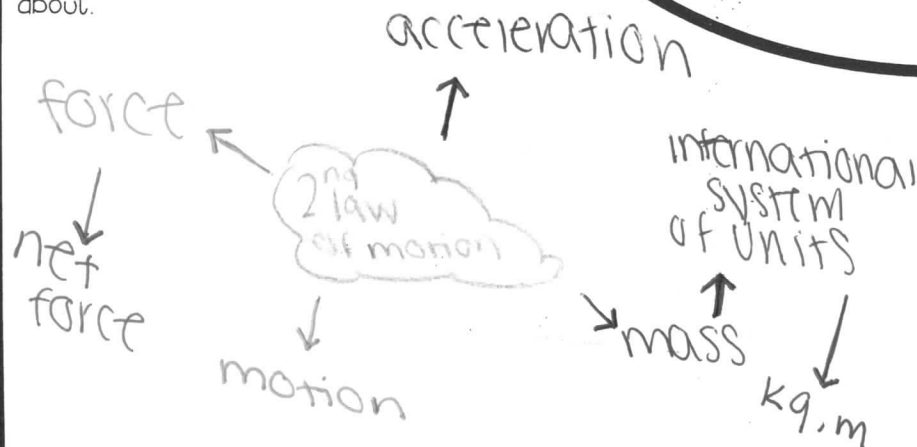
List as many key terms and phrases related to our current unit as you can.

Newton's 2nd
LAW

ch. 2

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

What is the formula for Newton's 2nd Law?

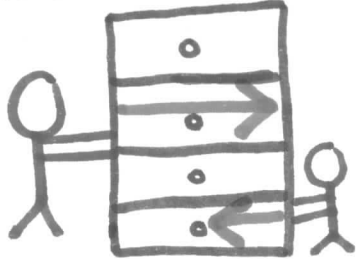
What is the unit for acceleration?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.

- When two forces acting on an object in opposite directions combine, the net force is in the same direction as the larger force.



Write It!

Write 2 statements about what you're learning

- according to Newton's first law of motion, balanced forces cause no change in an object's velocity.
- Newton's first law is the law of inertia.

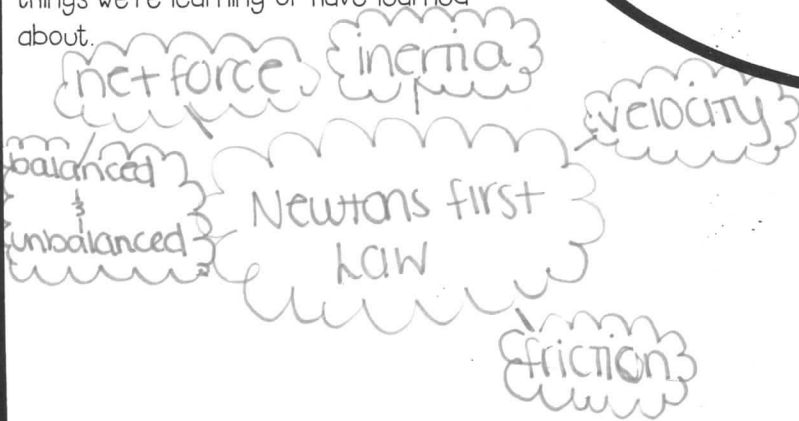
List It!

List as many key terms and phrases related to our current unit as you can.

Newton's 1st Law

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

- ch. 2
1. according to Newton's first law when a car is in motion + the driver is holding a cup of coffee, what will happen if she hits the brakes?
 2. why would a driver get whiplash during a rear end collision?
1. The coffee in the cup will continue to travel forward.
2. The driver would get whiplash because of the inertia pushing you head forward and the seatbelt holding you back.

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



List It!

List as many key terms and phrases related to our current unit as you can.

- Friction
- static
 - sliding
 - fluid

ch. 2

Write It!

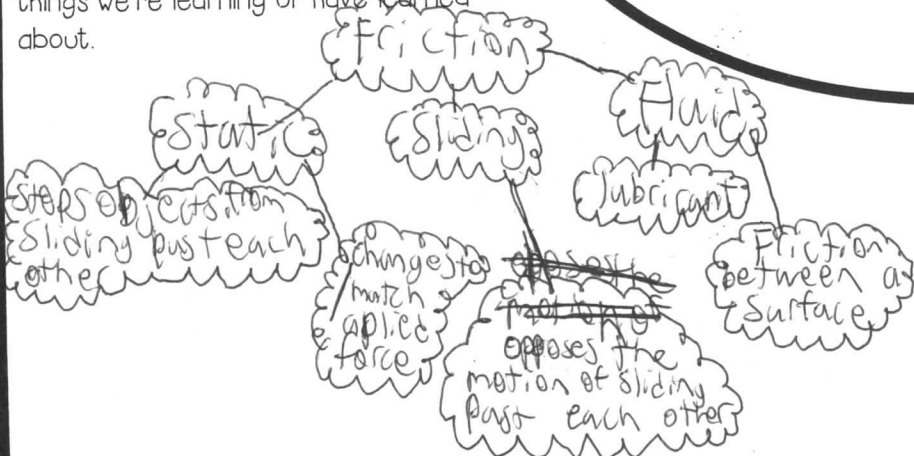
Write 2 statements about what you're learning

1) You can reduce friction with a lubricant but you can never get rid of it.

2) Friction resists the motion of two forces that are touching

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

1) A 30kg television sits on a table. The acceleration due to gravity is 10 m/s^2 . What force does the table exert on the television?
A. 0.3N . B. 3N . C. 300N . D. 600N.

2) True or false:

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

Contact forces - produce drag force friction pushing and pulling in which you are doing work

noncontact forces - you are not touching anything - gravity - magnetic and electricity you are not doing work

List It!

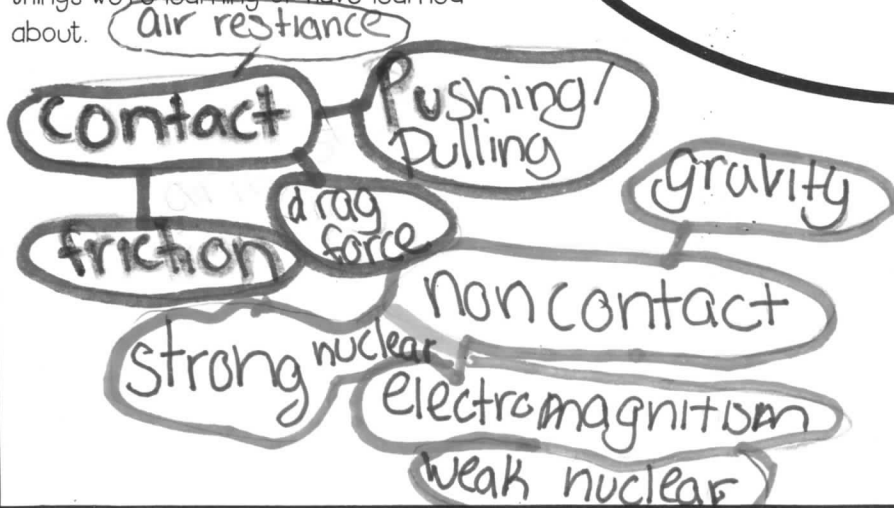
List as many key terms and phrases related to our current unit as you can.

contact and non contact forces

ch. 2

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

Q1. If you push a shelf is it a noncontact force or a contact force contact ✓

Q2. If you have a balanced force are you doing work

no ✓

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

- Write 2 statements about what you're learning
- mechanical advantage is the ratio of a machine's output force produced to the input force applied.
 - Equation to solve mechanical advantage:

$$MA = \frac{F_{out}}{F_{in}}$$

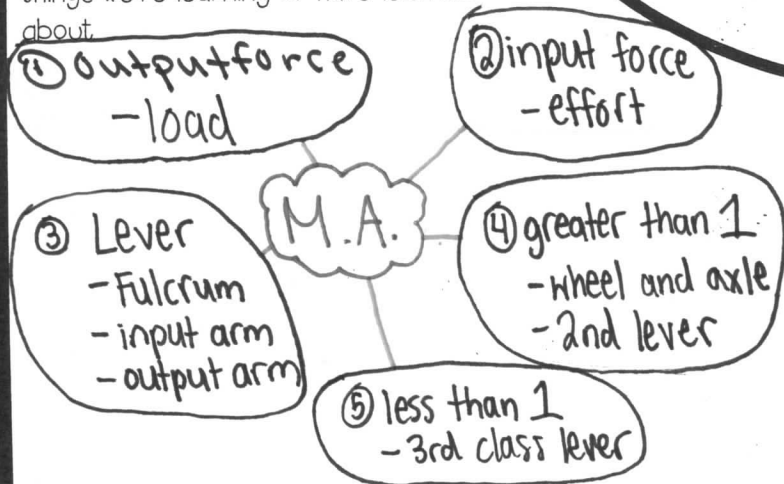
List It!

List as many key terms and phrases related to our current unit as you can.

Mechanical Advantage

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

ch. 3

- Q. If the output force is small, the input force is _____.
- Q. What is the M.A. of the pulley in the (draw it box.) _____

Answers (1) 1/9 (2) 2

Chris. Neves/Roberto Toledo

Exit Slips

Victor Louie/Frankie LoPiccolo

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.

Cartoons
by
Victor



Write It!

Write 2 statements about what you're learning

I'm learning about mechanical advantage and what how to find it.

I'm learning about the different classes of levers and what each class does.



List It!

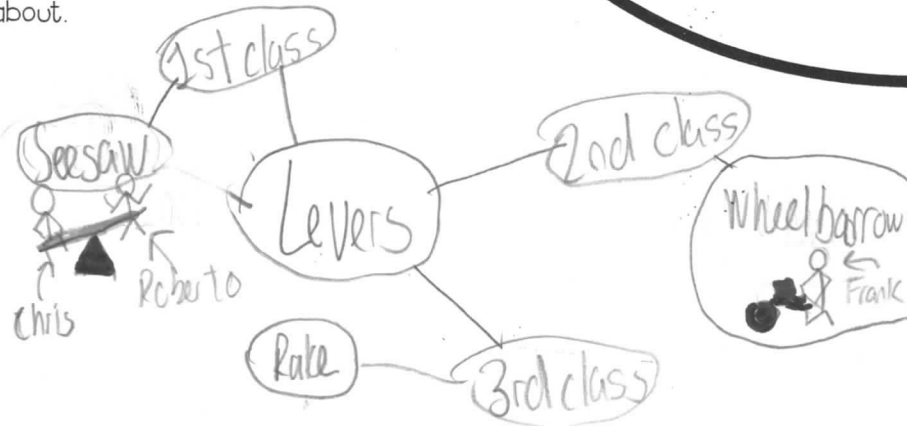
List as many key terms and phrases related to our current unit as you can.

- simple machines
- inclined plane
- wheel and axle
- lever

cn3

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

What are the three classes of levers?

What are the MAs for each type of simple machine?

$(1^{st} \text{ less than } 1, 2^{nd} = \text{greater than } 1, 3^{rd} = \text{less than } 1)$
 $(1^{st} = 1, 2^{nd} = \text{greater than } 1, 3^{rd} = \text{less than } 1)$
 Wheel + Axle - greater than 1
 Inclined plane - depends

$1^{st} = 1$
 $2^{nd} = \text{greater than } 1$
 $3^{rd} = \text{less than } 1$

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

When you do work it is a push or pull on an object

IF an object doesn't move, there is no work done

List It!

List as many key terms and phrases related to our current unit as you can.

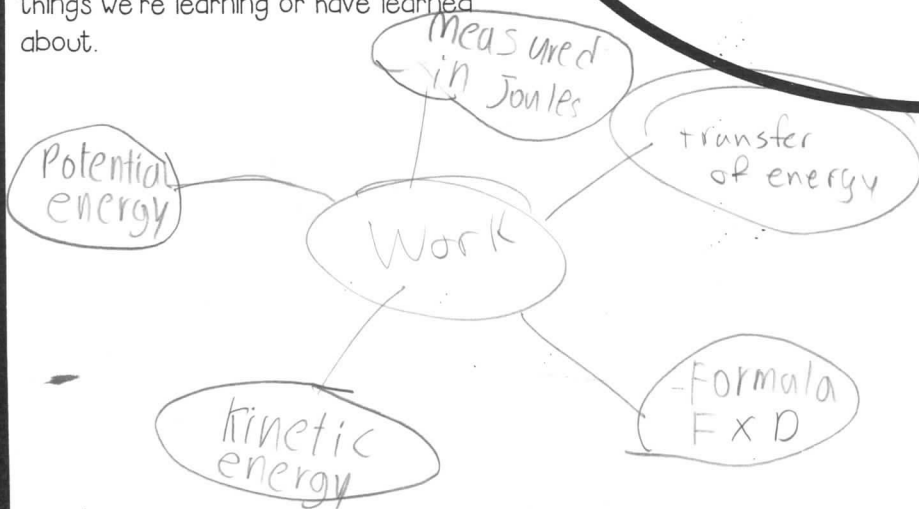
WORK

The amount of energy used as a force moves an object over a distance.

Ch. 3

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

① ~~What~~ what is the formula for work?

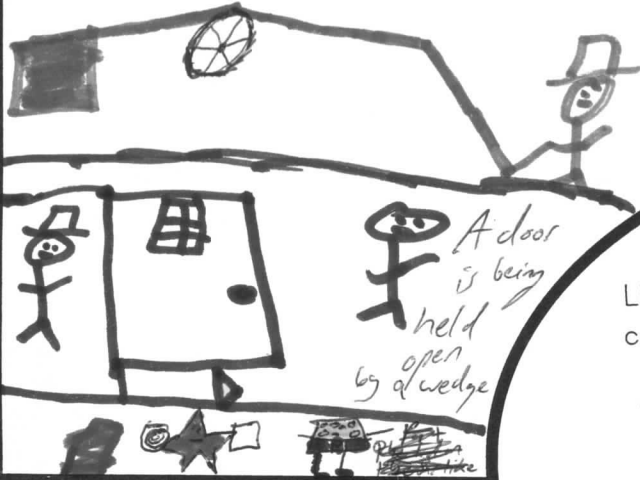
② What is work measured ~~in~~ in?

~~same~~ same Joules $W = F \times D$

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



A man named Archibald is pulling a rope which is attached to a pulley attached to a box which will lift the box.

A door is being held open by a wedge.

Put the lid on the jar like a screw.

Write It!

Write 2 statements about what you're learning

A pulley is a simple machine that consists of a grooved wheel with a rope or cable wrapped around it.
 wedge - a simple machine that consists of an inclined plane with one or two sloping sides. It is used to split or separate an object.

List It!

List as many key terms and phrases related to our current unit as you can.

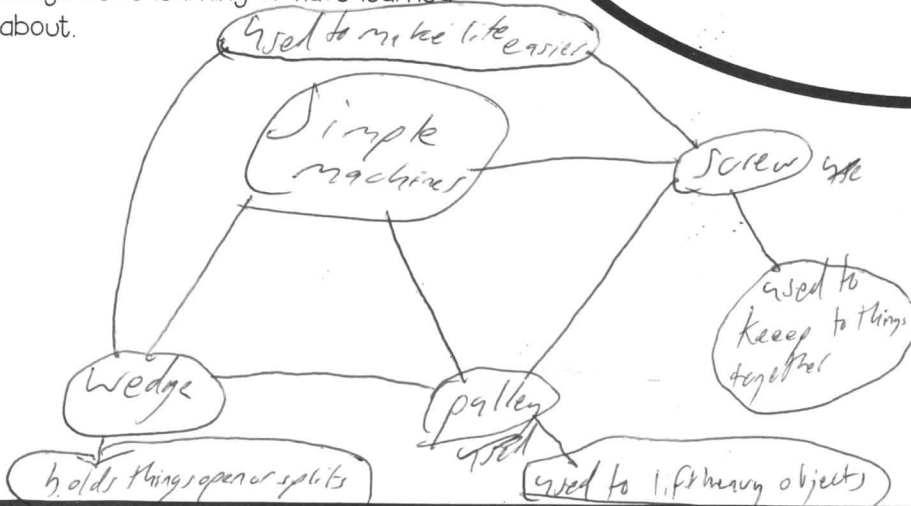
simple machines

- pulley
- wedge
- screw

Ch. 3

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

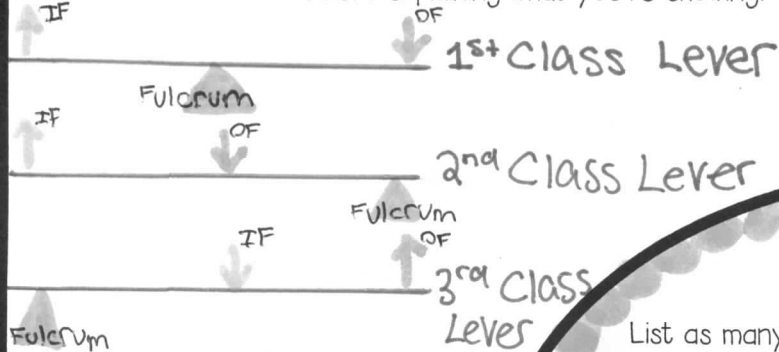
Write 2 thoughtful questions related to what we're currently learning.

1. list three examples of a screw.
2. How do these three simple machines make life easier?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



IF → input force
OF → output force

Write It!

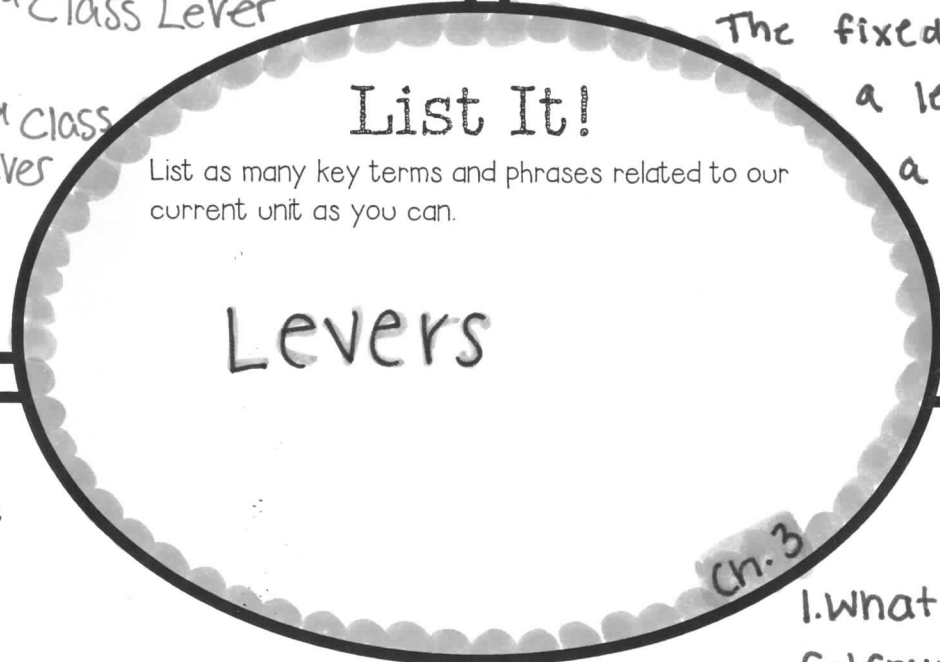
Write 2 statements about what you're learning

A lever is a simple machine made up of a bar that pivots, or rotates, around a fixed point.

The fixed point about which a lever pivots is called a fulcrum.

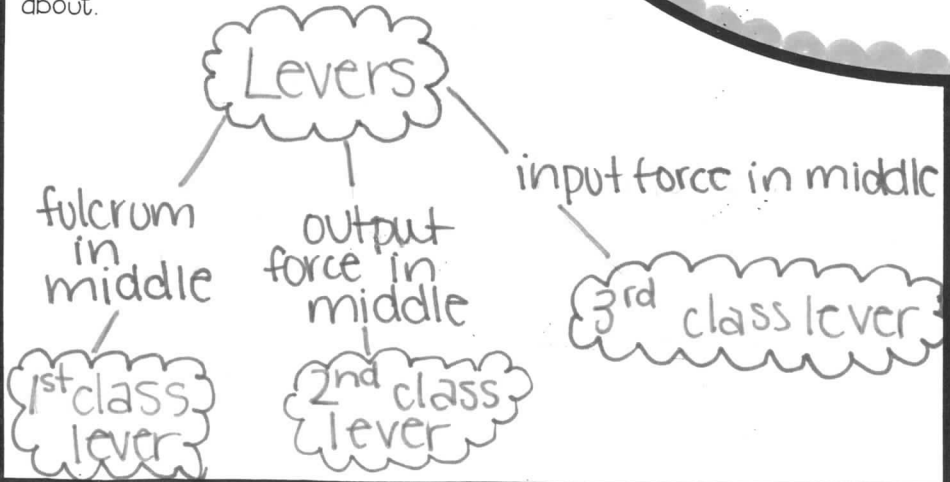
List It!

List as many key terms and phrases related to our current unit as you can.



Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

1. What is the distance from the fulcrum to the input force?

2. The location of the fulcrum determines the _____ in first class levers.

3. The mechanical advantage of a second class lever is always (greater/less) than one.

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

- When an object sinks, it means that the object's weight has exceeded the buoyant force

List It!

List as many key terms and phrases related to our current unit as you can.

Archimedes Principle

- Fluid forces

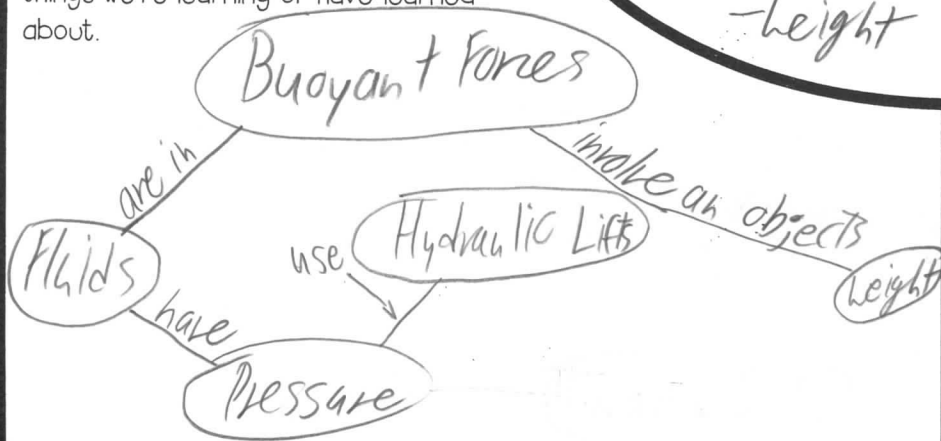
- Hydraulic Lifts
- height

- Bernoulli's Principle
- Atmospheric pressure
- Buoyant force
- Pressure
- fluids
- Pascal's principle
- drag forces
CM4

- Buoyant forces are in all fluids. Also, air counts as a fluid.

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

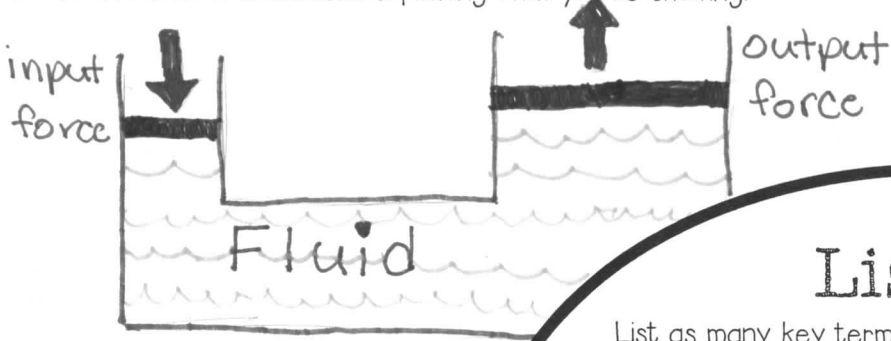
Write 2 thoughtful questions related to what we're currently learning.

- How do drag forces work?
- What are the similarities and differences of Pascal's and Bernoulli's principle?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

- A hydraulic lift demonstrates Pascal's Principle
- States that when pressure is applied to a fluid in a closed container, the pressure increases by the same amount everywhere in the container

List It!

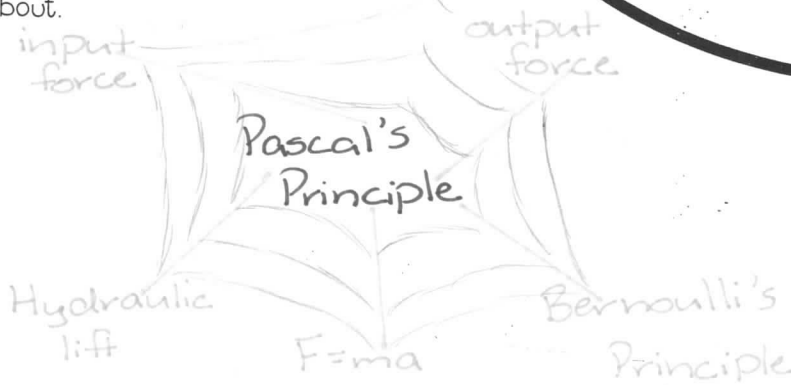
List as many key terms and phrases related to our current unit as you can.

Pascal's Principle

ch.4

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

- Why is the output force greater than the input force in a hydraulic lift?
- What is the formula for force?

Pressure is always equal throughout increasing area of output piston = larger force
 $F = M \cdot A$

Liam Brown, Tim Daly, Peter Seguero, Andrew Sarnely

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



According to Bernoulli's principle, when water moves faster in the pinched part of a hose, it applies less pressure on the sides of the hose.

List It!

List as many key terms and phrases related to our current unit as you can.

Bernoulli's principle

ch. 4

Write It!

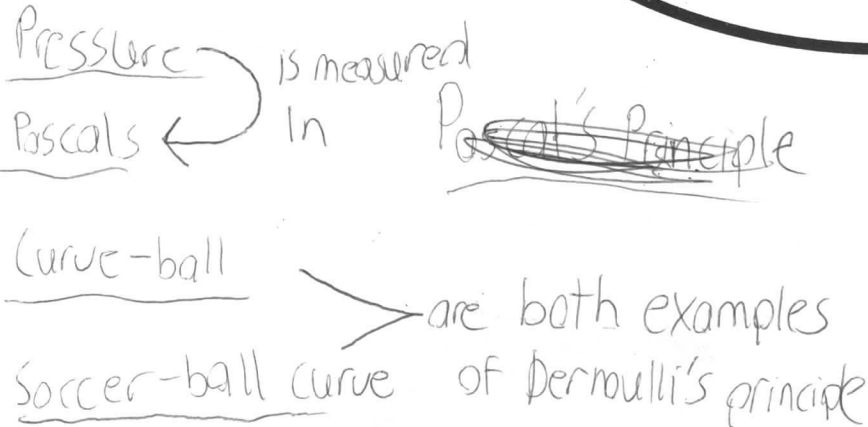
Write 2 statements about what you're learning

The speed of a fluid increases when the pressure of the fluid decreases.

Pressure is the amount of force applied per unit of area.

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

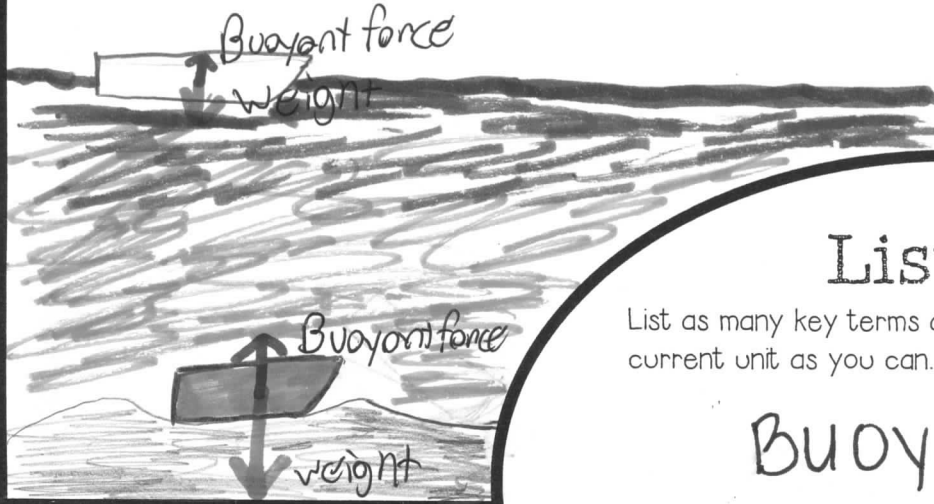
1) When the pressure of a fluid decreases, what happens to the speed?

2) Why does a soccer ball curve to the side with lower pressure? 1) increases 2) bc air moves from areas of high to low pressure

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

A buoyant force works on any object in water or air.

List It!

List as many key terms and phrases related to our current unit as you can.

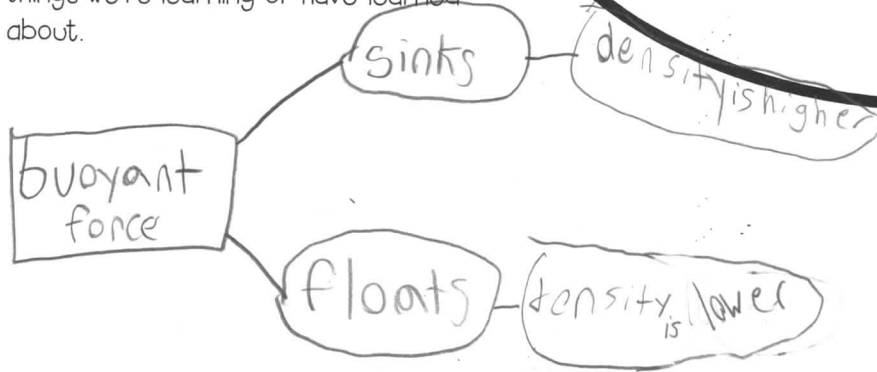
Buoyant Force

An object will float if it has a lower density than water or air.

water is denser than air.

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

ch. 4

1) What is Archimedes' principle?

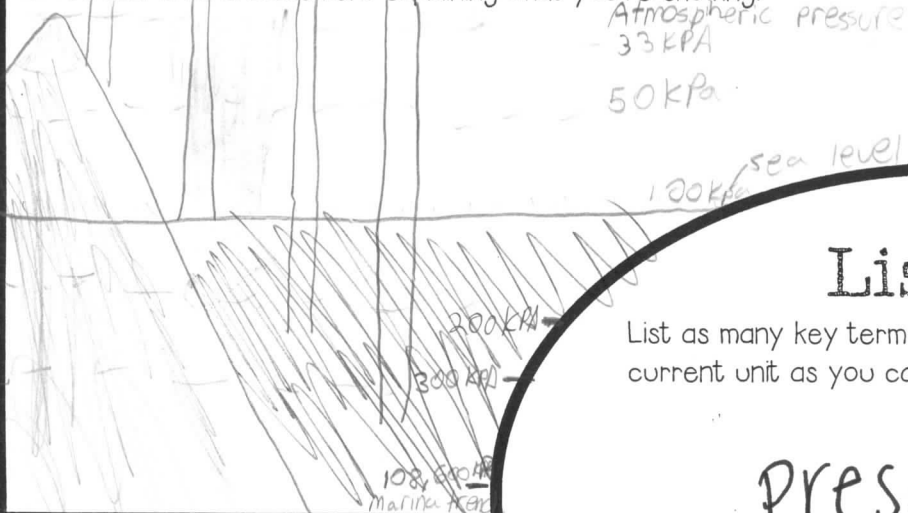
2) what direction is buoyant force always in.

the weight of the fluid that an object displaces is equal to the buoyant force acting on the object
upward

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about, and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

- The formula to find pressure is $pressure = force \div area$
($P = \frac{F}{a}$)
- Pressure is the amount of force applied to an objects surface

List It!

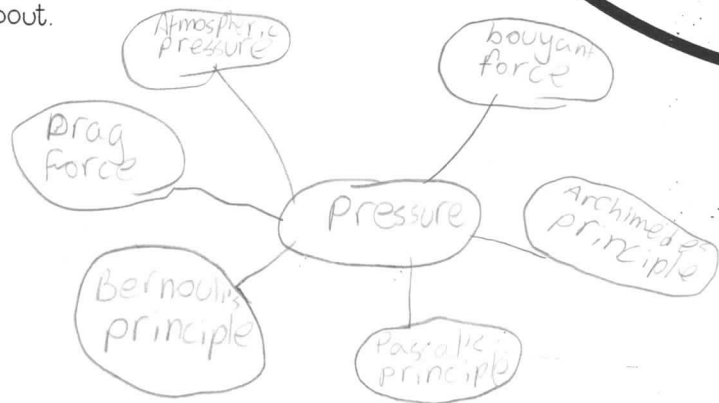
List as many key terms and phrases related to our current unit as you can.

Pressure

ch. 4

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

- What is the formula to find pressure?
- Which one applies more pressure a snowboard or a ski.

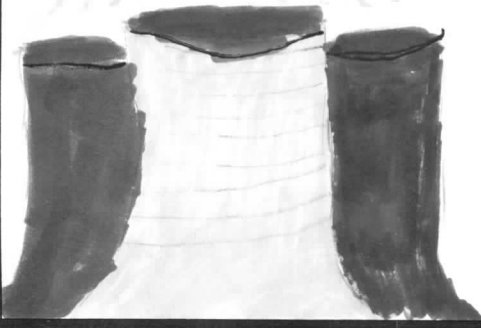
Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.

Nuclear Energy Transformation: NE-TE-ME-EE

These are nuclear power plants used ~~to produce~~ ^{to create} energy.



Write It!

Write 2 statements about what you're learning

A nuclear power plant makes energy by splitting atoms, or fission.

Although hydroelectric power plants do not emit pollutants, dams can disturb the life cycle of some wildlife.

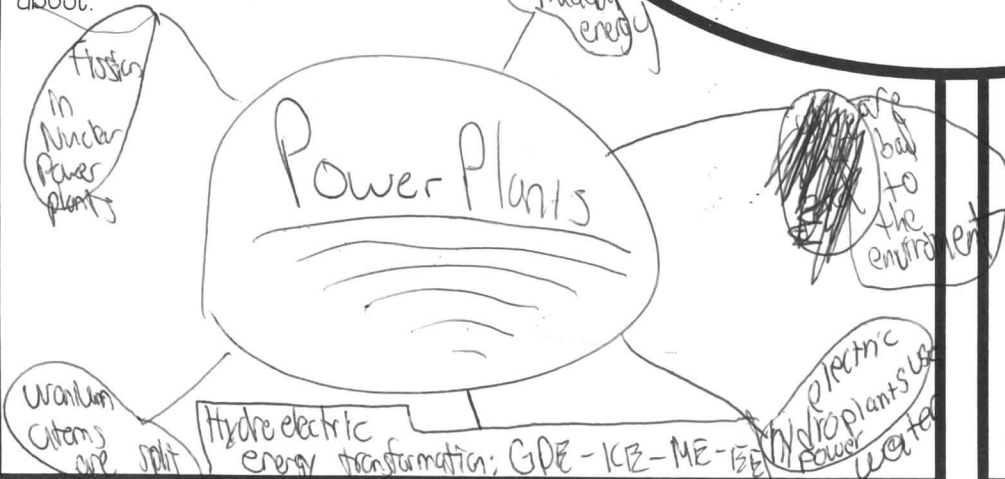
List It!

List as many key terms and phrases related to our current unit as you can.

nuclear power plant
 electric power plant
 hydroelectric power plant

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

Which power plant is the most "green"?

Hydroelectric

Much of the energy we use is from which type of power plant?

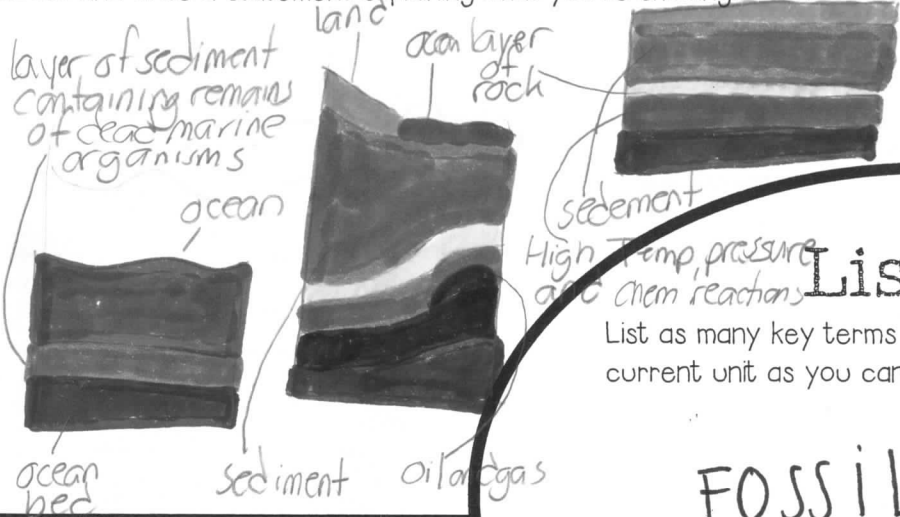
Electric power plant

EPP Energy transformation: CPE-TE-ME-EE

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

- All fossil fuels are exhaustible energy resources
- 85% of fossil fuels have been used up

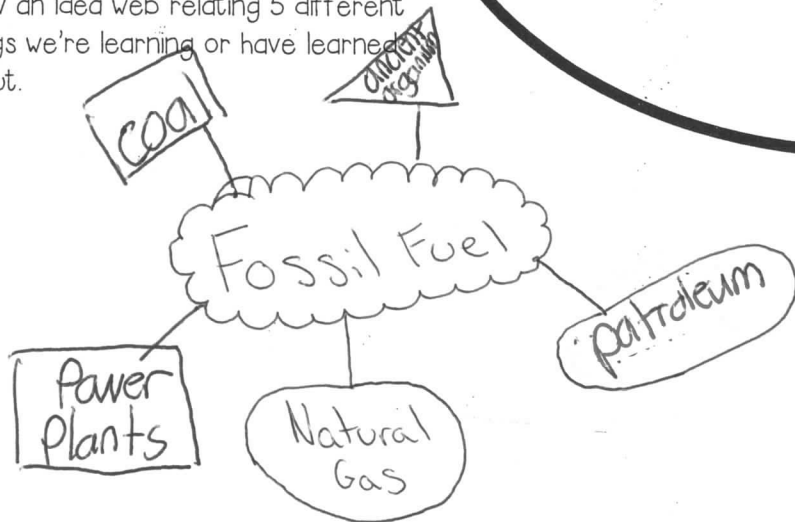
List It!

List as many key terms and phrases related to our current unit as you can.

Fossil fuels

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

Ch. 5

- ① Kerosene, diesel and gasoline are examples of _____ that is used to power cars and trucks
- ② _____ is the fossil fuel formed from plant organisms on land while _____ is a fossil fuel formed from ocean organisms

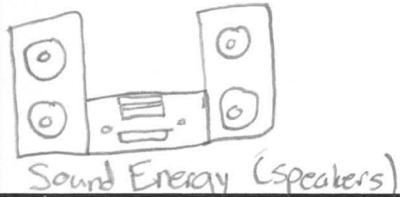
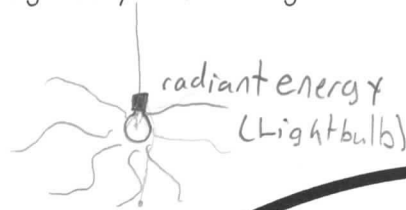
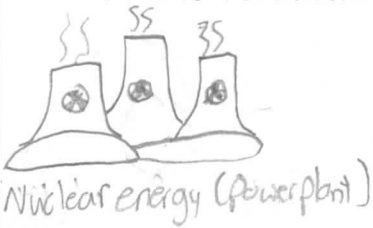
Aidan McBrien (did most of it)

Exit Slips

Markus Gonzalez

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

There are visible and invisible forms of radiant energy.

List It!

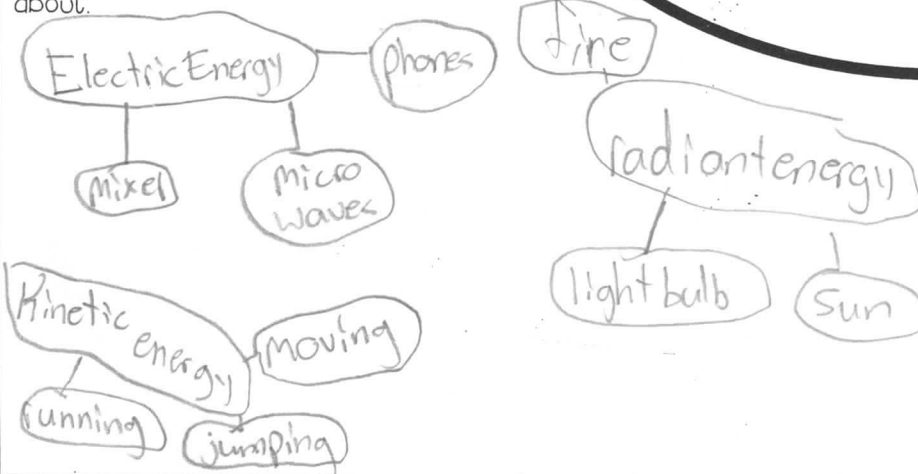
List as many key terms and phrases related to our current unit as you can.

Nuclear Energy
Sound Energy
radiant Energy

Nuclear energy is a very dangerous nonrenewable resource.

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



ch. 5

Question It!

Write 2 thoughtful questions related to what we're currently learning.

What is the splitting of atoms called?

Does the sun have nuclear or radiant energy, or both?

ch. 5

Charlie Mandracchia (did the rest)

Matt Scarfizzi

Nicole Kameel, Tiara Seta

Exit Slips

Danielle Thomas, Jacqueline Emerson

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



List It!

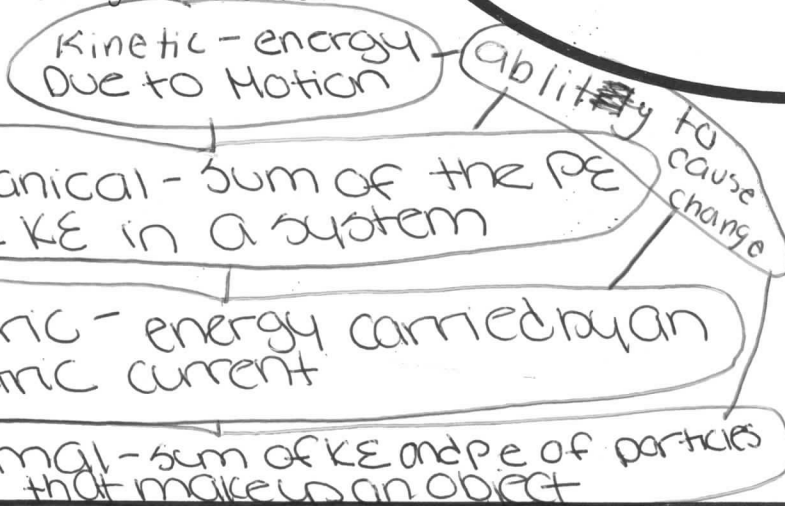
List as many key terms and phrases related to our current unit as you can.

Mechanical Energy
Electric Energy
Kinetic Energy
Thermal Energy

ch5

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Write It!

Write 2 statements about what you're learning

All objects have TE.
Our bodies use ME, KE, and TE

Question It!

Write 2 thoughtful questions related to what we're currently learning.

1) What ~~energy~~ energy is used most commonly as a waste energy?
 a) potential b) kinetic c) mechanical d) thermal

2) what is an example of electric energy?
 a) mixer b) sun c) kite d) balloon

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

1. Energy can be present even if objects are not moving
2. when you release the end of a stretched rubber band, the stored elastic potential energy is transformed into kinetic energy

List It!

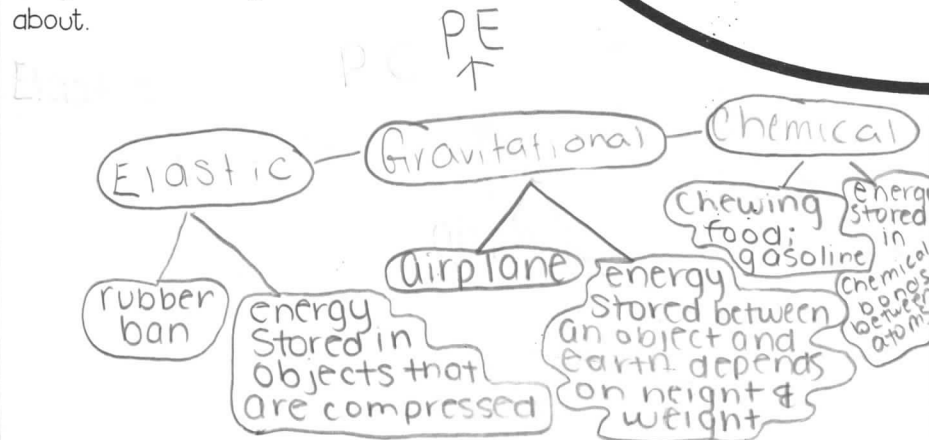
List as many key terms and phrases related to our current unit as you can.

Elastic Potential
Gravitational potential
chemical potential
energies

ch. 5

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

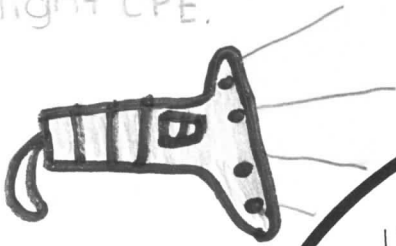
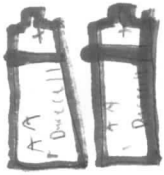
1. In what ways are all forms of potential energy the same?
2. What does GPE depend on?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.

The batteries make the flashlight CPE.



Write It!

Write 2 statements about what you're learning

- Most materials give off thermal energy, but in most cases it is the waste energy.

For example:

a flashlight

- All energy's can be transferred into thermal energy

List It!

List as many key terms and phrases related to our current unit as you can.

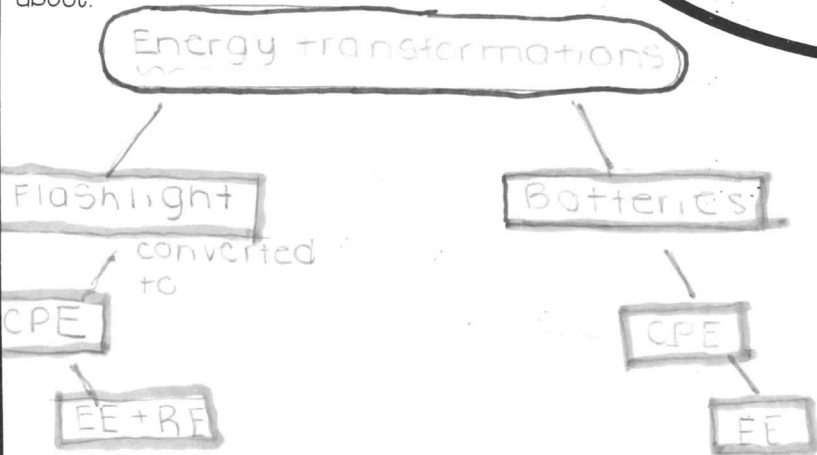
Energy transformations

CE PE KE EE TE
GPE EPE
CPE

Ch. 5

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

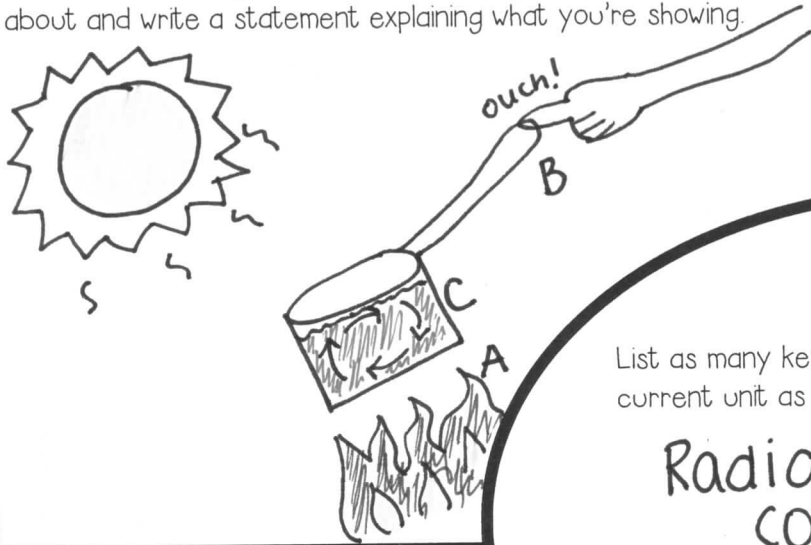
what is an electric magnetic wave?

Are all electro magnetic waves visible?

Exit Slips

Draw It!

Draw a picture/diagram demonstrating a concept we're learning about and write a statement explaining what you're showing.



Write It!

Write 2 statements about what you're learning

Radiation, conduction, and convection are three ways in which thermal energy is transferred.

List It!

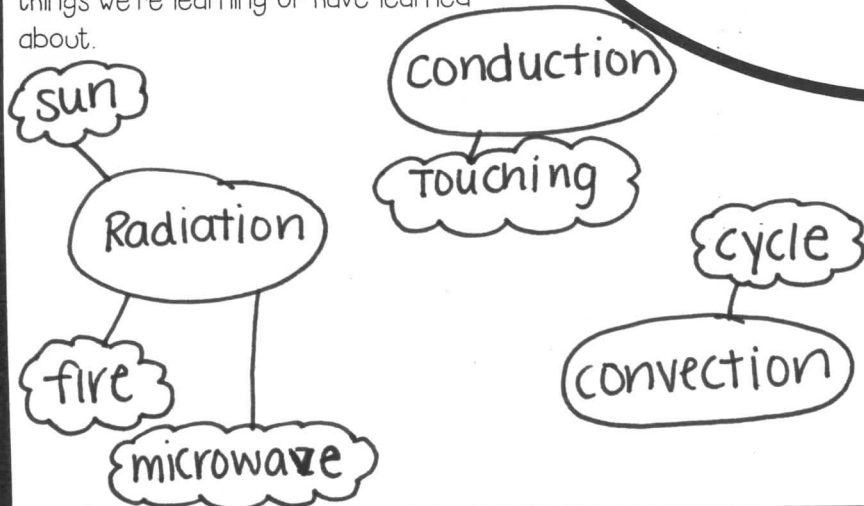
List as many key terms and phrases related to our current unit as you can.

Radiation
conduction
convection

Metals are thermal conductors while rubber and wood are thermal insulators.

Web It!

Draw an idea web relating 5 different things we're learning or have learned about.



Question It!

Write 2 thoughtful questions related to what we're currently learning.

- ch6
- ① Determine if these are an example of radiation, conduction, or convection.
 - The attic is cooler than the basement.
 - Pop some pizza rolls in the microwave.
 - ② conductors and insulators have what kind of specific heat?