

Science Cut Ups

Content Centers

Includes **12** color printed center activities, **KEYs** & center instruction cards

\$45

Physical Science – Grades 3 – 5

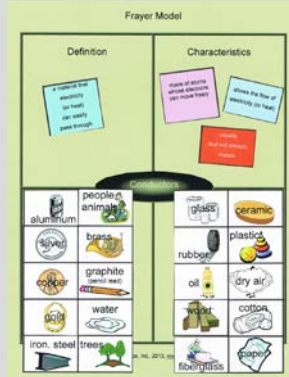
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TEKS	Center Title	TEKS	Center Title
4.6B	Conductors vs Insulators	4.6D, 5.6D	Investigating Force & Motion
4.6C, 5.6B	Electric Circuits	3.5AB, 3.6BC, 4.5A, 5.6A, 5.6C	Properties of Matter: Observation Cards
3.6A, 4.6A, 5.6ABC	Examining Energy	5.6C	Reflection or Refraction
3.6B	Force & Motion	3.5D, 4.5B, 5.5BC	Separating Mixtures
3.6BC, 4.6D, 5.5A	Forces “High Fives”	3.5BC, 4.5A, 5.5A	Solids, Liquids, Gases
3.6A, 4.6A, 5.6A	Forms of Energy	3.5A, 3.6A, 3.8A, 4.5A, 4.8A	What’s the Temperature?

For all materials:

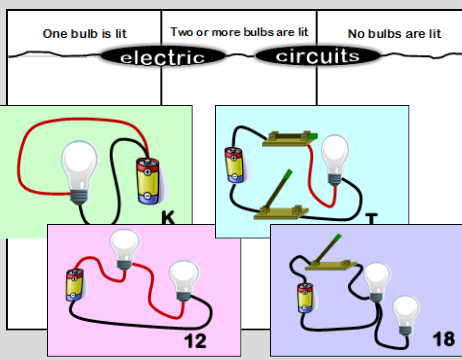
- Laminate all materials before using for longer durability*.
- Cut manipulative pieces apart and place in bags or envelopes for each center.
- Center Instruction Cards are included.
- **KEYs** are included.
- Use with small student groups to encourage scientific dialogue.
- Differentiate for the specific abilities of a student or group (Special Education, ELL, GT) by removing/adding manipulative pieces in each set.
- Provide reference materials for students to access content information.
- Encourage students to record key information from each activity in a science notebook/journal.
- Encourage students to generate additional examples for each activity set.





Conductors vs Insulators

Use a Frayer Model to identify characteristics, examples & non-examples.



Electric Circuits

Compare complete & incomplete circuits using 48 diagrams in 4 different sets.

A	B	C	D
1. a form of energy is involved	6. something is being put together	7. something is being separated	8. heating is causing changes
2. a process is taking place	9. cooling is causing changes	10. energy is changing forms	
3. movement is causing changes			
4. energy is being made (created)			
5. energy is being lost (destroyed)			

Examining Energy

Match energy statements to 20 visuals & identify forms of energy in each.

slide attract fast
turn friction up
rock twist back
slow gravity forth
pull swing down
push straight spin
force motion roll
in zigzag out

Force & Motion

32 examples of movement with 26 word cards.

PUSH/PULL					
GRAVITATIONAL					
FRICTIONAL					
MAGNETIC					
BUOYANT					
CENTRIPETAL					

Forces High Five

Use a game format to identify force examples: gravity, friction, magnetism, buoyancy, & centripetal force.

chemical	energy stored in bonds or fuels	biomass, petroleum, natural gas, propane, coal
nuclear	energy of an atom	uranium, plutonium
mechanical	energy of place or motion	water held back by a dam, compressed metal springs, stretched rubber bands
light	energy moving in waves through empty space	visible light, x-rays, solar energy
thermal	energy of moving particles with matter	oven, furnace, toaster, heat in your body
sound	energy of matter that is vibrating	radio, video, thunder, wind
electrical	energy of moving electrons	static electricity, lightning, current electricity
motion	energy of matter moving from one place to another	waves, wind

Forms of Energy

Match 24 cards into sets of 3 (term, graphic, description).

Annali is investigating how far a balloon will travel when the air is released out of it. She is filling 5 balloons with different amounts of air and attaching the balloons to a straw threaded onto a piece of yarn which is stretched from

measuring tools used gravity friction/air resistance

- What is the tested?
- What will be observed?
- What needs to be tested?
- What other force(s) would be used in this investigation?
- What safety rules would be used in this investigation?
- What type of investigation is this?

Investigating Force & Motion

Identify variables & choose tools & safety rules, & relate to force & motion.

1. How does it feel?	2. What odor does it have?	3. What is the temperature?	4. What is the mass?	5. How flexible is it?
6. How big or small is it?	7. What sound does it make?	8. Is it solid or liquid?	9. Is it solid, liquid or gas?	10. Is it magnetic?
11. What colors is it?	12. How many parts does it have?	13. Does it sink or float?	14. Is it soluble in water?	15. Is it a conductor or an insulator?
16. Is it living or nonliving?	17. How does it move?	18. What is the volume?	19. Is it a mixture/ solution?	20. Is light reflected or refracted?

Properties of Matter: Observation Cards

24 thinking prompts for observation activities.

The bending of light as it moves from one material into another.	Light passes through a material of different density & either speeds up or slows down.	The bouncing back of light from a surface.	Light hits an object at an angle & moves away from the object at the same angle in a new direction.
Light moving through convex lens	Light waves reflecting the eye	Light hitting an object at an angle	Light reflecting off a surface

Available in Spanish

Reflection or Refraction

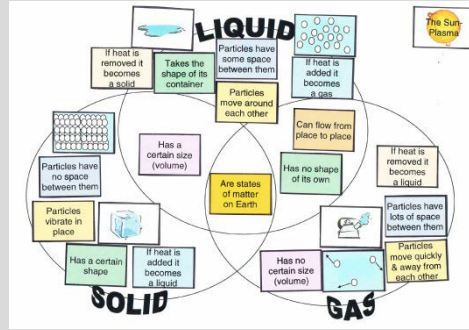
Organize 16 description & example cards on a data chart & create a foldable®.

	Add water	Pour through	Heat on a hot plate
Water & sawdust	Wax chips, salt & iron filings	Oil & water	Iron filings, sugar & pepper
Sawdust & sugar	Plastic pellets, steel BB's & pepper	Water & assorted sediments	Sand in ice
Iron filings & pepper	Iron filings, sawdust & sugar	Glycerine & corn syrup	Wooden beads, steel BB's & sand
Potting Soil	Pepper & sand	Salt & water	Salt, pepper sand & iron filings

Freeze the liquid
 Skim floating objects off the top
 Use sticky tape
 Use a compass
 Use a flashlight
 Use an electric charge
 Use tweezers

Separating Mixtures

Choose from method cards to explain how 16 mixtures can be separated & record in a data chart.



Solids, Liquids & Gases

24 description cards to place in Venn Diagram.

hot bath
 today's weather
High 104°F
 body temperature
 FORECAST

40°C | 1°C | 100°C | 35°C

What's the Temperature?

Analyze daily situations, read thermometers, & make predictions using Celsius scale.