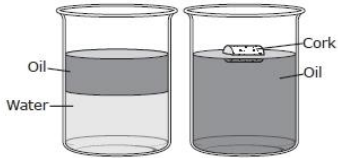
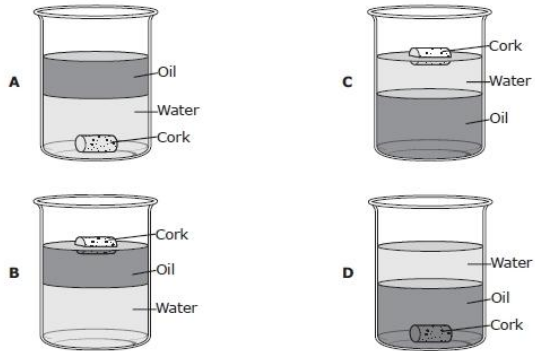


- 1 The diagram below shows one container with oil and water and another container with oil and a cork.



Which diagram shows what would most likely happen if oil, water, and a cork were all placed in one container?



Monday

- 3 A small bowl contains a mixture of toothpicks and glass marbles. The easiest way to separate the mixture without touching it would be to –

- A add glue to the mixture
- B place a magnet in the bowl
- C pour the mixture into a paper cone
- D add water to the bowl

- 2 Which of these is the best conductor of electricity?

- F Glass rod
- G Cotton string
- H Plastic tubing
- J Copper penny

10 A teacher mixes a white powder into a beaker of water. The powder cannot be seen in the water. The teacher then heats the mixture until the water evaporates and the powder can be seen again. Which property of the powder is the teacher demonstrating?

- F** Solubility
- G** Density
- H** Conductivity
- J** Mass

21 A mixture of beads was placed in a container, as shown below. The beads are of various sizes, and each one is made of plastic, glass, or steel.



The mixture would be easy to separate because all the beads —

- A** are less dense than water
- B** are solids
- C** have the same mass
- D** are attracted to a magnet

29 A student made a mixture using equal amounts of salt and pepper. The salt grains were the same size as the pepper grains. What should the student do to most easily separate the pepper from the salt?

- A** Use a pair of tweezers to remove each grain of pepper
- B** Run a small magnet through the mixture to attract the pepper
- C** Put the mixture in water and filter the pepper out of the water
- D** Use a strainer with a fine wire screen to remove the pepper

Tuesday

42 Some people add sugar to their hot tea. Which property of the sugar remains the same when the sugar is in the tea solution?

- F The taste of the sugar
- G The size of the sugar crystals
- H The color of the sugar
- J The texture of the sugar

33 A student reads the label on the bottle of salad dressing shown below.



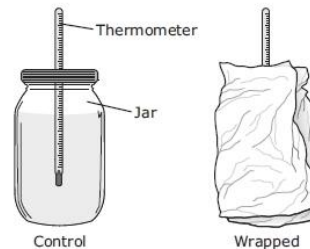
Ingredients:
Oil, Vinegar, Spices.
Directions: Shake well before
using. Refrigerate after
opening.

Why would the student shake the salad dressing well before using it?

- A Vinegar and oil have different densities.
- B Vinegar and oil easily form a solution.
- C Vinegar and oil both contain water.
- D Vinegar and oil are both liquids.

Wednesday

26 A teacher sets up an experiment using five jars like the ones shown below. The teacher keeps one jar unwrapped as the control. The other four jars are wrapped with equal thicknesses of four different materials.



The jars are each filled with an equal amount of water that is 92°C. Students observe and record the water temperature in each jar after 10 minutes. The results are shown in the table below.

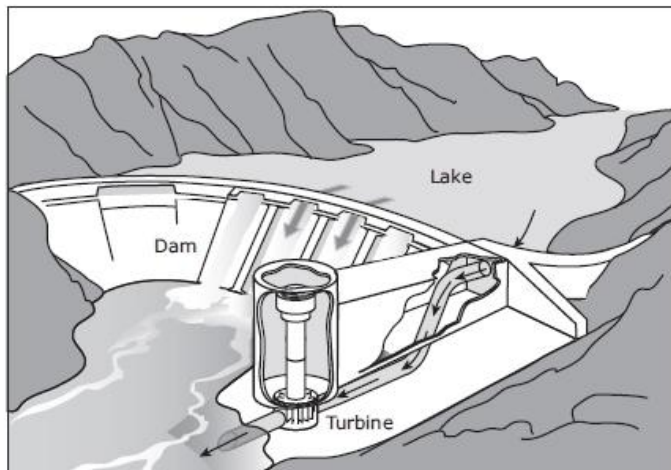
Water Temperature After 10 Minutes

Material Wrapping Jar	Water Temperature (°C)
No wrapping (control)	84
Newspaper	87
Construction paper	87
Paper towel	85
Cotton towel	90

Which property of the materials wrapping the jars are the students most likely investigating?

- F State of matter
- G Thermal energy insulation
- H Thermal energy production
- J Ability to conduct electricity

- 6 Water flows through turbines in dams like the one shown below. The flowing water makes the turbines spin.



What type of energy is used to make the turbines spin in this type of dam?

- F Light energy
- G Thermal energy
- H Sound energy
- J Mechanical energy

Thursday

- 14 A student measures the mass of several substances and records the results in the table below.

Substances for Investigation

Substance	Mass (g)
Water	125
Toothpicks	5
Table salt	30
Sugar cubes	20
Alcohol	98
Cooking oil	75
Marbles	40
Plastic cubes	35

What is the difference in grams between the total mass of the liquid substances and the total mass of the solid substances used in the investigation?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

- 23 Some ways to separate mixtures are listed below.

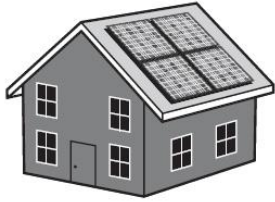
Ways to Separate Mixtures

1. Boil the mixture to evaporate the water
2. Pass a magnet over the mixture
3. Pour the mixture through a paper filter
4. Use tweezers

A student is given a beaker containing gravel and water. Which of these ways could the student NOT use to separate the gravel from the water?

- A 1
- B 2
- C 3
- D 4

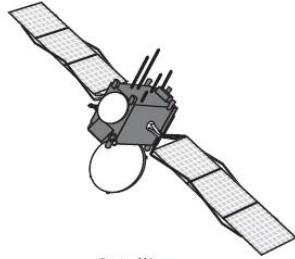
18 Three different objects that use the same source of energy are shown below.



Energy-efficient house



Calculator



Satellite

What is the energy source for these objects?

- F Light energy
- G Mechanical energy
- H Sound energy
- J Electrical energy

Friday

23 A teacher wears protective gloves to lift a metal pan filled with boiling water from a hot plate. Why are the protective gloves necessary?

- A The metal pan creates thermal energy.
- B The metal pan insulates thermal energy.
- C The metal pan conducts thermal energy.
- D The metal pan reduces thermal energy.

4 Which change occurs when lemon juice is mixed with water?

- F The mass of the lemon juice decreases.
- G The water becomes a solid.
- H The lemon juice dissolves and spreads out evenly in the water.
- J The volume of the water decreases.