

CISD Grade 6 Science Unit 05

Some questions (c) 2012 by CSCOPE.

- 1** A new school is being constructed as a "green school" which means all efforts are made to make the school as environmentally friendly as possible.

Which of the following would be the MOST practical way to supplement or add to the electrical power system?

- A** solar panels on the roof
 - B** hydroelectric power from a school pond
 - C** nuclear power plant in the utility room
 - D** diesel powered generator outside the building
- 2** Which energy transformation produces electricity with the LEAST negative environmental impact?
- F** generating electricity from a natural gas-fired power plant
 - G** generating electricity from a coal-fired power plant
 - H** generating electricity from a wind turbine power system
 - J** generating electricity from a solar panel system

- 3** The use of which of the following resources would be MOST affected by changes in weather?

- A** wind
- B** geothermal
- C** natural gas
- D** nuclear

Use the following data table for the next two questions.

	Nuclear	Biomass	Geothermal	Y
By-products	X	Nitrogen Oxides	Minimal	None
Environmental Concerns	Heated water is dangerous to aquatic life.	Increased water and chemical use on farmland	Water wells could be depleted over time.	It increases potential for flooding.
Availability	Abundant	Abundant	Available in few fields around the world.	Abundant

4 What BEST replaces the X in the table?

- F Radioactive Waste
- G Carbon Dioxide
- H Sulfur Dioxide
- J Nitrogen Oxide

5 What energy source BEST replaces Y in the table?

- A Solar Energy
- B Hydroelectricity
- C Natural Gas
- D Wind Energy

6 Which of the following sentences could be a testable hypothesis?

- F Solar energy should be used to heat all homes.
- G If we don't stop burning fossil fuels, then the greenhouse effect will get worse.
- H Inexhaustable resources are the best energy sources because they will never run out.
- J Burning coal will produce more environmental pollution than using wind turbines.

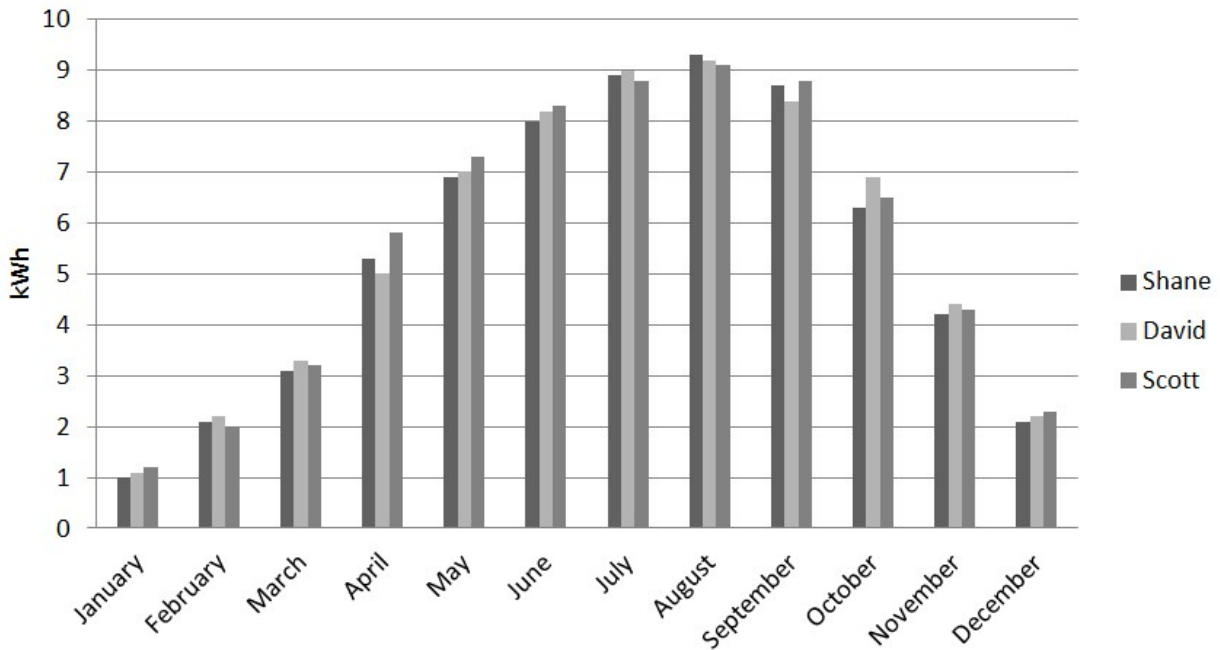
7 An advertisement for a new car that runs completely on solar power claims that the car is "100% environmentally friendly because it produces no environmental pollution." Which of these questions is the MOST important environmental question for consumers to answer before they consider buying this car?

- A** Which major car company produces this car?
- B** How much does this car cost?
- C** Where can consumers find evidence that it produces no pollution?
- D** What color does the car come in?

8 Mrs. Matthews has a special box in her science lab for broken pieces of glass. The "broken-glass" box keeps the glass separate from the other trash. The broken-glass box allows Mrs. Matthews to —

- F** recycle the broken glass
- G** conserve the glass used in the lab
- H** reuse the glass needed in the lab
- J** reduce the amount of glass needed in the lab

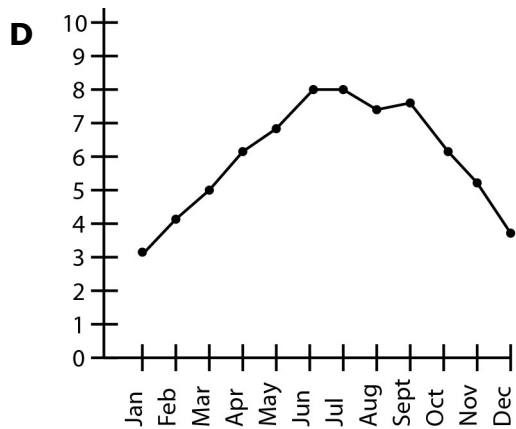
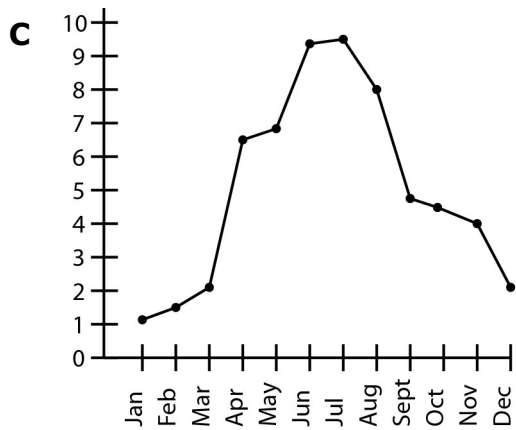
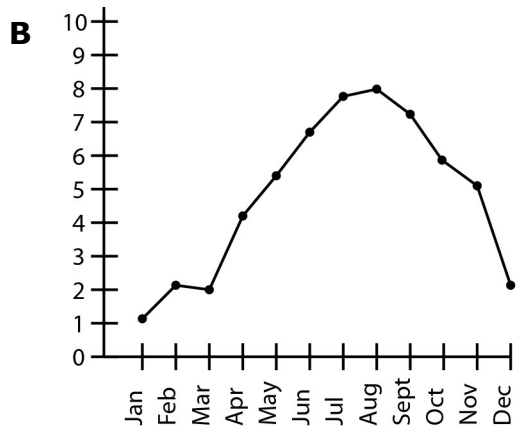
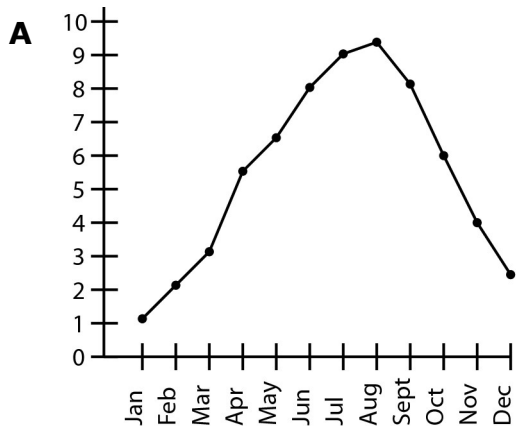
Use the following graph for the next three questions.



- 9** The graph above shows the amount of electricity used by three different people during each month for an entire year. Which of the following statements is BEST supported by the graph?
- A** February and November have about the same climate and electricity use.
 - B** All three of these people pay a lot for their electric bills each month.
 - C** If this trend continues, all three will use the most electricity next year in July.
 - D** Less electricity is used in the winter months.

- 10** What is the likely reason electricity use is so great in the summer?
- F** People have an electric air conditioner and a gas heater.
 - G** The solar panels heat the house in the winter.
 - H** People have large trees that shade the house in the summer.
 - J** People need more light in the winter because it is darker longer.

11 What is another way to show Shane's data?



12 Your school is trying to save money by managing its energy resources. What are THREE things your school could do to manage its energy resources?

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