

Is It Developing and Using Models?



Below are listed things that students might do in a science class. Check off the things that are true about students developing and using models.

A	<input type="checkbox"/>	Create a simple sketch to illustrate how the shape of an object helps it function to solve a problem.
B	<input type="checkbox"/>	Choose the best drawing that describes how kinetic energy is converted to thermal energy.
C	<input type="checkbox"/>	Use a diagram to compare the needs of plants and animals and the places they live.
D	<input type="checkbox"/>	Develop a quantitative model to show how carbon moves through the earth's various systems.
E	<input type="checkbox"/>	Observe sugar dissolving in water to provide evidence supporting a model that matter is made of particles too small to be seen.
F	<input type="checkbox"/>	Construct a diagram that describes how light reflecting from objects and entering the eye allows objects to be seen.
G	<input type="checkbox"/>	Examine a flow chart to understand that energy in animals' food was once energy from the sun.
H	<input type="checkbox"/>	Use the analogy of a city to understand the functions of a cell as a whole and ways part of cells contribute to the function.
I	<input type="checkbox"/>	Revise a drawing to describe how the total number of atoms does not change in a chemical reaction.
J	<input type="checkbox"/>	Use a globe and a light bulb to demonstrate that the earth's seasons are caused by its tilted axis and orbit around the sun.
K	<input type="checkbox"/>	Compare 3D ball and stick structures of ammonia and methanol molecules.
L	<input type="checkbox"/>	Use the periodic table to predict the properties of elements.
M	<input type="checkbox"/>	Use a simulated "bee" to pollinate Wisconsin Fast Plants (<i>Brassica rapa</i>).
N	<input type="checkbox"/>	Use a chemical equation to illustrate how photosynthesis transforms light energy into stored chemical energy.
O	<input type="checkbox"/>	Use a "slinky" to simulate the amplitude and wavelength of waves.
P	<input type="checkbox"/>	Compare plant and animal life cycles in computer simulations to identify common events or phases.
Q	<input type="checkbox"/>	Identify the limitations of a diagram describing the movement of matter among plants, animals, decomposers, and the environment.

Why do you think the examples you chose are true about students developing and using models?

Circle the examples of developing and using models that are at your grade band.