

The following pages include the answer key for all machine-scored items, followed by a sample response for the hand-scored item.

- The rubrics show sample student responses. Student responses other than that shown in the rubric may earn full or partial credit.
- Which responses to hand-scored items receive full or partial credit will be confirmed during range-finding (reviewing sets of real student work)
- If students make a computation error, they can still earn points for reasoning or modeling.

Item Number	Answer Key
1.	<b>A</b>
2.	<b>Needed for Plant Growth = <u>Water, Air</u> : Not Needed for Plant Growth - <u>Soil</u></b>
3.	<b>Supports Student Claim = <u>Animals that blend in can better sneak up on prey and Animals that blend in can better hide from predators.</u></b>
4.	<b>Part A: <u>The values of the editable bars going from left to right should be 1, 2, 2, 18</u></b> <b>Part B: <u>B</u></b> <b>Part C: <u>black-winged, less polluted, white-winged</u></b>
5.	<b>Box near rain = <u>Hydrosphere</u></b> <b>Box underneath white cloud = <u>Atmosphere</u></b> <b>Box in flooded water = <u>Hydrosphere</u></b> <b>Box on beach= <u>Geosphere</u></b>
6.	<b>Fresh water = 3%</b> <b>Salt water = 97%</b>
7.	<b>The location in the Tropical climate zone (Southeast Asia)</b>
8.	<b>Part A: <u>Argentina — 9°C, Germany — 19°C, New Zealand — 7°C, Sudan — 32°C</u></b> <b>Part B: <u>Argentina and New Zealand</u></b> <b>Part C: <u>Both countries have warmer temperatures in January than in July, The countries are in the same hemisphere.</u></b>
9.	<b>Largest Amplitude — <u>dragger in top right corner</u></b>

	<b>Shortest Wavelength — <u>dragger in bottom right corner</u></b> <b>Move the least — <u>dragger in bottom left corner</u></b>
10.	<b>Small up and down arrows when the waves are small.</b> <b>Large up and down arrows when the waves are large.</b>
11	<b>Motion energy is converted into electrical energy.</b> <b>Electrical energy is converted into light energy.</b>
12.	<b>Open-Ended</b>

### #12 Open Ended

Example Student Response:

Student A's claim is supported by Figure 1 because the balloon is sealed onto the bottle and nothing is added or taken out. Table 1 supports the claim because if nothing is added or taken out, the final mass will be the same as the initial total mass of the items. Table 1 shows this initial mass as 43 grams.

1 point: Student identifies that student A's claim is best supported by the information in Figure 1 and Table 1.

1 point: Student describes that the setup in Figure 1 is sealed (a closed system) so all the matter that is present before mixing is still present after mixing.

1 point: Student describes the total mass of the substances as 43 grams and this should be the same after mixing since no matter was added or removed.