PD Leader Master Practice Identifying One Main Learning Goal Plants and Animals (Answer Key)

Use Analysis Guide A (Identifying One Main Learning Goal) to assess the quality of the following candidate learning goals.

One Main Learning Goal	Strong Learning Goal? Yes/No	Reasons
How do animals get their food?	No	This isn't a complete-sentence idea.
2. Worms take in air through their skin.	No	This isn't a big idea worthy of 40 minutes or more of instruction. It could be an important supporting idea for the big idea that all animals need to take in air to stay alive.
Plants take in some of their energy- supplying food from the soil.	No	This is scientifically inaccurate. Plants get all of their energy-supplying food by making it themselves during photosynthesis.
4. Like animals, plants need food to live and grow.	Yes	This is a big idea that's grade-level appropriate and worthy of 40 minutes or more of instruction. This idea involves comparing plants and animals, a key relationship that's important for kindergartners to understand. Kindergartners most likely know that animals need food to live and grow, but they may not be sure about plants.
The differences and similarities between plants and animals	No	This isn't a complete-sentence idea.
Most plants have green parts because the pigment <i>chlorophyll</i> makes them green.	No	This isn't a big idea worthy of 40 minutes of instruction. It's a supporting idea for the big idea that plants make their own food. Even as a supporting idea, this idea isn't grade-level appropriate for kindergartners because it's too advanced.
7. All plants and animals need air, but they take it in from their environment in different ways.	Yes	This is a big idea that is grade-level appropriate and worthy of 40 minutes of instruction. This idea also appears in Next Generation Science Standards and

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		involves comparing similarities and differences between plants and animals.
8. Plants use light, water, and air to make their own food.	Yes/No	This is an extremely important big idea that distinguishes plants from animals. Some would argue that this idea should not be included in the Plants and Animals lessons because it's too advanced for kindergartners and doesn't appear in the Next Generation Science Standards. However, we think that kindergartners can understand this concept, and the lessons will show whether we're correct.
 Both plants and animals are made of cells that need food and oxygen to release energy for life processes. Only plant cells are able to use sunlight, air, and water to make energy-supplying food. 	No	This statement contains multiple learning goals instead of just one main learning goal. In addition, the ideas are too advanced for kindergartners and therefore aren't grade-level appropriate. They also aren't included in the Next Generation Science Standards.
Students will conduct simple experiments to identify what plants need to live and grow.	No	This describes an activity, not a complete science idea.
11. Plants grow in soil.	No	This is an observation about plants that most kindergartners know about. It isn't a science idea worthy of 40 minutes or more of instruction.
12. Animals need to take in food, but plants don't.	No	While this statement is scientifically accurate, it leaves out the important idea that plants can make their own food, and therefore, it might contribute to a misconception that plants don't need food to live and grow.