

PD Leader Master
Practice Identifying One Main Learning Goal
Energy Transfer
(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
1. Energy can be transferred from object to object.	Yes	This is a complete sentence and, at this specific grade level, is worthy of a 40-minute lesson.
2. Potential and kinetic energy	No	This isn't a complete sentence. It's a topic statement and isn't specific enough for one main learning goal.
3. Rolling different-sized marbles down a ramp.	No	This is an activity, not an important science idea worthy of 40 minutes or more of instruction.
4. At what point does a ball rolling down a steep incline have the most kinetic energy?	No	This is a question, so it can't be a learning goal.
5. A person on a bicycle has more potential energy at the top of a hill than at the bottom.	Yes/No	This is a complete sentence and is worth a single lesson, but depending on the students, it may not be a worthy focus for 40 minutes of instruction. This might be one of two different science ideas students learn within a lesson that leads to a larger lesson learning goal.
6. When an object moves faster, it has more energy than when it's moving slower.	Yes	This is a complete sentence and is a somewhat difficult concept to learn. It's worthy of a 40-minute lesson focus.
7. A marble and ramp can be used to model potential and kinetic energy.	No	This isn't a science idea. It's a statement concerning materials that can be used to model potential and kinetic energy.
8. Conservation of energy	No	This is a topic statement, not a complete sentence.
9. Energy is transferred and transformed but not created or destroyed.	Yes	This is an idea worthy of pursuing in a 40-minute lesson.