The dropper springs upward halfway to the drop point and falls back downward. The dropper springs upward all the way to the drop point and then repeats the motion.

Learning Targets

Learning targets provide explicit information about what students should know, be able to do, and understand. Each chapter lists learning targets for each lesson, and further breaks down which learning targets will be formally assessed.

Example from Ch 2: Energizing Physics Learning Targets

2.3 (I can) Use energy conservation to determine mathematical relationships involving speed and height.

2.4 (I can) Quantify kinetic energy, gravitational potential energy, and total energy.

2.5 (I can) Use energy conservation to determine mathematical relationships involving speed and height.

2.6 (I can) Quantify kinetic energy, gravitational potential energy, and total energy.

2.7 (I can) Use energy conservation to quantify kinetic energy, gravitational potential energy, and elastic potential energy at various points in a bungee drop.

2.8. (I can) Use energy conservation to quantify kinetic energy, gravitational potential energy, and elastic potential energy at various points in a bungee drop.

2.9. (I can) Use energy conservation to quantify kinetic energy, gravitational potential energy, and elastic potential energy at various points in a bungee drop.

DGITY (Did you get it?) Questions.

After the conclusion of each introductory lesson, and prior to practice problems, each lesson has a DGITY question(s) that allows the teacher and student to quickly and formatively assess the understanding of the key ideas. For example, for analyzing the motion of the bungee jumper using the example in figure 2:

1. Now let’s consider what would happen to the bungee jumper after point 3 if energy is conserved?

   i. The dropper springs upward halfway to the drop point and falls back downward.
   ii. The dropper springs upward all the way to the drop point and then repeats the motion.
   iii. The dropper springs upward close to the drop point but not quite, then falls downward.
   iv. The dropper springs upward past the drop point and then falls downward.