

2 Tracking energy

- a. As a group, make an energy tree diagram to track what happens with energy in your toy's adventure.

- b. Discuss your system and how the energy associated with the wind-up toy changes.
- How did you define your toy system? Which objects are included? When does your energy tree diagram start and end?

- What *types of energy* are associated with the toy when it's stationary on the table? And when it moves?
- What are some ways to increase the toy's energy? And to decrease its energy?

* MAKING ENERGY TREE DIAGRAMS

Energy tree diagrams show the types of energy involved in an interaction, along with energy transfers that occur. In energy tree diagrams:

- **Ovals** indicate the *types of energy* (e.g., kinetic energy or heat energy) associated with an interaction.
- **Arrows** indicate the *energy transfers*, either from type to type or from one interaction to another.
- **Descriptions** explain the *event* linked to the energy transfer.

Here is an example for a burning log:

