

Playing with Energy

You need

- ★ the types of energy table; energy game cards (see copymasters)
- ★ a different-coloured counter for each player
- ★ counters for energy game tokens
- ★ classmates

Activity



This yo-yo has lots of potential energy!

When you let go, it will be kinetic!



Energy is defined as “the ability to do work”. It comes in two forms: **potential** (stored) energy and **kinetic** (moving) energy.

Example of energy	Type of energy
Petrol	

With a classmate, discuss whether the examples of energy on your copy of the types of energy table are potential or kinetic.

Game

Play the energy game with a group of classmates.

- Put each person’s counter on the starting space (the banana). Shuffle the energy cards and stack them face down next to the pile of potential energy tokens. The person whose birthday is closest to today goes first.
- At the start of each move (including the first), agree with your group whether the space you are on represents kinetic or potential energy.
 - If you are on a kinetic energy space, turn over an energy card and follow its instructions. If another player can show that you have made a mistake in your calculation, lose a turn.
 - If you are on a potential energy space, take 2 potential energy tokens from the pile. Decide if you want to convert some of your potential energy into motion by trading 1 potential energy token for each extra space you want to move. If you do trade, move now. This is the end of your turn.
- The first person to reach Finish with at least 3 potential energy tokens wins.

Start



Banana



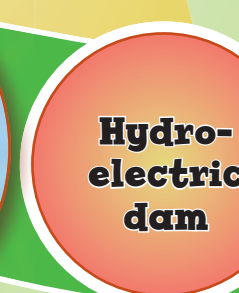
Wind



Petrol tank



Lump of sugar



Hydro-electric dam

Earthquake

Charcoal

Boiling kettle

Shaken-up soft drink can

Wound-up yo-yo

Ball at the top of the stairs

Tornado

Spinning wheel

Jogging

Speeding car

High dive

Ball rolling downhill

Coiled spring

Diver on a high diving board

Kicking a soccer ball

Rain

Stretched rubber band

AA Battery

A shout

Compressed air

Person skiing downhill

Rolling skateboard

Dried fruit and nuts

Finish

If you have at least 3 potential energy tokens, you win!

If not, go back to the high dive.

Focus

Categorising forms of energy