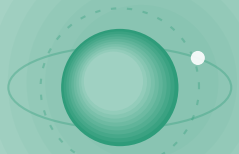
TEACHER ANSWER KEY

Elementary Lessons (K–5)





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Predictions below have fixed answers. Questions marked **Measured live** are graded against what the simulation actually produces, so the exact value depends on the student's run; use the tolerance shown in-game.

E-01 · Push & Pull (Elementary (K–5))

P1. If we fly one rocket with a small push and one with a big push, which one goes higher?
Answer: Measured live in the sim: compare the student's answer with the result shown after the flight (tolerance applies).

Standards: 3-PS2-1 (practice) – Compare how a bigger push changes how high the rocket goes.
Teacher note: one flight at full throttle; the other push is compared from the rocket calculator (it ignores air), shown after the flight.

E-02 · Gravity on Other Worlds (Elementary (K–5))

P1. We use the same rocket and the same push. Where does it fly higher?
Answer: Measured live in the sim: compare the student's answer with the result shown after the flight (tolerance applies).

Standards: 5-PS2-1 (practice) – Gravity pulls things toward the center of a world; compare two worlds.
Teacher note: the rocket flies from Earth; the Moon is compared from the two gravity numbers, which the child reads in the step.

E-03 · Air Resistance & Parachutes (Elementary (K–5))

P1. Which landing is softer?
Answer: Measured live in the sim: compare the student's answer with the result shown after the flight (tolerance applies).

Standards: 3-PS2-1 (enrichment) – Air pushes back on a falling capsule; a parachute makes the push bigger.
Teacher note: one drop from 3 km with the parachute; the no-parachute speed is the physics reference shown after the landing (above 20 m/s, checked by a test).

E-04 · Day, Night & Solar Power (Elementary (K–5))

P1. When does the battery fill up?
Answer: Measured live in the sim: compare the student's answer with the result shown after the flight (tolerance applies).

Energy from sunlight; no standard code is claimed for this elementary exploration. Teacher note: the battery state is not a simulation channel, so the child watches the Systems box.