

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Section: \_\_\_\_\_

## Electron Jumper Activity

### Ellie the Electron's Amazing Journey!

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#### Phase 1: ENGAGE (2 minutes)

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**Getting Started:** Open [peebedu.com](http://peebedu.com) and navigate to Electron Jumper

Meet Ellie - she's an electron with an important job!

**The Mystery:** How do plants turn sunlight into food? Today YOU are Ellie the Electron!

**Quick Think:** Where do plants get energy? -----

## Phase 2: EXPLORE (8 minutes)

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### Play and Discover

#### Level 1: Escape from Water

- Ellie starts in: -----

- When leaving water, what gas appears? -----

#### Level 2: The Slide

- Ellie moves: UP / DOWN
- Red H<sup>+</sup> symbols are pumped: UP / DOWN

#### Level 3: Power Up Again

- Need more: -----

#### Level 4-5: Final Steps

- Help make: -----

### Phase 3: EXPLAIN (6 minutes)

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#### Connect the Pieces

**Ellie's Path:** Draw arrows to show her journey:

Water → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → Sugar

#### Energy Pattern:

- Photons make energy go: UP / DOWN
- Ellie needs photons: ONCE / TWICE

**The Big Discovery:** When water splits, it releases \_\_\_\_\_ that we breathe!

## Phase 4: ELABORATE (3 minutes)

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### Think About It

**No Light Test:** Plant in a dark closet:

- Can make food? YES / NO

### Why This Matters:

Without photosynthesis, Earth would have no:

## Phase 5: EVALUATE (1 minute)

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### Quick Check

Fill in the blanks:

Sunlight → Splits \_\_\_\_\_ → Makes \_\_\_\_\_ gas → Energy makes \_\_\_\_\_

**Exit Question:** Your friend asks: ‘Where does oxygen come from?’ Your answer: \_\_\_\_\_

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**Cool Fact:** Every breath you take comes from Ellie’s journey in plants!

### Key Vocabulary

See activity for vocabulary specific to this topic.