

Seedling Growth and Plant Responses

READ ALOUD PASSAGE

A tropism is a plant's growth response to a direction. Gravitropism sends roots down and shoots up, no matter how the plant is turned. Lay a potted bean seedling on its side. In a day or two the stem will curve and grow upward again, and the roots will turn down.

Phototropism bends shoots toward the brightest light available. A plant on a windowsill slowly leans toward the glass. Turn the pot around, and it leans back.

Plants bend through uneven growth, not muscle. Auxin makes the shaded side elongate faster, pushing the tip toward light. The cells on the dark side get longer, the cells on the bright side do not, and so the stem curves.

Activity 1: Word Hunt

Look back at the reading. Find four adverbs and write them on the lines.

1. _____
2. _____
3. _____
4. _____

Activity 2: Sentence Scramble

These words are mixed up. Put them in order to make a sentence. Start with a capital letter and end with a period.

1. seedling / on / potted / bean / side / lay / a / its

2. light / available / phototropism / toward / shoots / the / bends / brightest

Activity 3: Sentence Scramble

These words are mixed up. Put them in order to make a sentence. Start with a capital letter and end with a period.

1. down / toward / roots / gravity / grow

2. stem / back / curved / the / up

3. the / plants / bend / light / toward

Activity 4: Four Kinds of Sentences

Write four different kinds of sentences. Use the word in bold in each one.

(tropism) Statement:

(gravitropism) Question:

(phototropism) Exclamation:

(seedling) Command:
