

Seeds and Germination

READ ALOUD PASSAGE

A seed needs water, oxygen, and the right temperature all at once to germinate. To germinate means to start growing. A bean can sit in a dry jar for years and do nothing. Give it all three, and within a few days it wakes up.

Water soaks in first, called imbibition, and the seed swells. You can see this if you leave a dry bean in water overnight. By morning it is bigger, and its skin is wrinkled or split.

The root, or radicle, usually emerges first, because nothing else can happen without water. The shoot follows, and the cotyledons are the first leaves, already folded inside the seed. They often look different from the leaves that come later. Their job is to feed the young plant until its true leaves can start making food from sunlight.

Activity 1: Word Sort Challenge

Sort the words in the box. Write each word under the right heading.

WORD BANK

germinate dry swells overnight root shoot bean first later emerges
young wrinkled

Nouns	Verbs	Adjectives	Adverbs

Activity 2: Brainstorm Details

Read the topic sentence. Write four key words or phrases that could support it. Do not write full sentences.

TOPIC SENTENCE

A seed needs three things to germinate.

Key words and phrases:

- _____
- _____
- _____
- _____

Activity 3: Notes to Sentences

These are notes, not sentences. Turn each set of notes into a complete sentence.

1. water soaks in → imbibition → seed swells

2. radicle → comes out first

3. cotyledons → feed young plant
