



Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1

The invention of the **compound light microscope** enabled scientists to observe cells, helping them to

- A determine the number of atoms in a molecule
- B study the behavior of chordates
- C discover a basic similarity among organisms
- D develop techniques for growing plants in a laboratory



2

A student placed groups of 25 seeds in a variety of temperatures ranging from 0 to 55°C. A difference in the **rate of germination** observed in the groups at different temperatures was most likely due to the **effect of temperature** on

- A ammonia
- B bases
- C acids
- D enzymes



3

The diagram below represents one-half of a dissected bean seed.

Which **solution** should be used to determine if **structure A** contains **starch**?



4

Which sentence represents a **hypothesis**?

- A Environmental conditions affect germination.
- B Boil 100 milliliters of water, let it cool, and then add 10 seeds to the water.

5



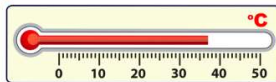
## PREVIEW

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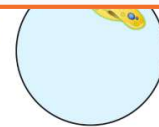
7

temperature in the incubator be **increased** to reach this temperature?

- A 3      C 9
- B 6      D 12



- A to the right and up
- B to the right and down
- C to the left and up
- D to the left and down



9

A wet mount of **unstained elodea** (a green aquatic plant) is observed using high power (400x) of a compound light microscope. Which **structures would most likely be observed**?

- A cytoplasm, endoplasmic reticulum, & nucleolus
- B ribosome, Golgi complex, & vacuole
- C nucleus, chloroplast, & cell wall
- D centrosome, lysosome, & plasma membrane



10

A compound light microscope has a **10x** eyepiece, **10x** objective, **40x** objective, and lowpower field diameter of 1,600 micrometers. **What is the diameter of the field of view when the high-power objective lens is used?**


- A 10  $\mu\text{m}$
- B 40  $\mu\text{m}$
- C 400  $\mu\text{m}$
- D 1,600  $\mu\text{m}$



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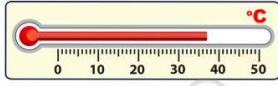
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