

5.4 Explanations Tool: How does a cell in the stem of a fungus use food to grow and divide?

The Matter Movement Question

Draw and label arrows that show molecules moving into and being used in the fungus' cell.

- Show and label molecules with carbon atoms moving into the cell.
- Label the molecules that stay in the cell

The Matter Change Question

Name the chemical change that fungal cells use to build large organic molecules:

What molecules are carbon atoms in before the chemical change?

What other molecules are needed?

What molecules are carbon atoms in after the chemical change?

What other molecules are produced?

The Energy Question

What forms of energy go into this chemical change?

What forms of energy go into this chemical change?

What forms of energy come out of this chemical change?

Explain in words: How does a cell in the stem of a fungus use food to grow and divide? (*Answer on the back*).

Use this Explanations Tool to help guide your written explanation, being sure to answer the Three Questions.

Remember: **Atoms last forever** (so you can arrange atoms into new molecules, but can't add or subtract atoms).
Energy lasts forever (so you can change forms of energy, but energy units can't appear or go away).