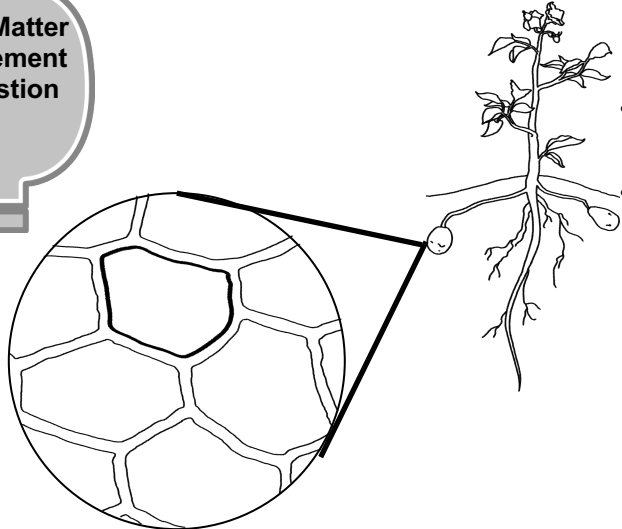


4.2 Explanations Tool: How does a cell in a potato plant use glucose for energy to move and function?

The Matter Movement Question



Draw and label arrows that show molecules moving into, through, and out of a cell in a potato plant.

- Show molecules with carbon atoms moving into and out of the cell.
- Show other relevant molecules

The Matter Change Question

Name the chemical change that allows cells to move and function:
Write the chemical equation for this change:

What molecules are carbon atoms in before the chemical change?

What other molecules are needed?

Chemical Change

What molecules are carbon atoms in after the chemical change?

What other molecules are produced?

The Energy Change Question

What forms of energy go into this chemical change?

Energy Transformation

What forms of energy come out of this chemical change?

Explain in words: How does a cell in a potato plant use glucose for energy to move and function? (Answer on back).

Use this Explanation Tool to help guide your written explanation, be 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).