

PUZZLE What Is the Question? Puzzle

Chapter 2

Listed below in the column at the right are answers about cellular processes. You must provide the correct questions. The first one has been done for you as an example. Use the following list of words to write your questions.

| | | | |
|-------------------|-----------|-------------------------|---------|
| active transport | DNA | osmosis | sugars |
| atoms | fats | permeable membrane | water |
| carbohydrates | matter | proteins | waxes |
| carrier molecules | molecules | semi-permeable membrane | wilting |
| diffusion | oils | starches | |

Questions

Answers

- What is matter?
" DNA
- " diffusion
- " are atoms
- How are molecules made?
" are fats
- " are waxes & oils
- " atoms are in water?
- " are carbohydrates
- " are sugars
- How are starches formed?
" are proteins
- " is osmosis
- " causes wilting
- " is a permeable membrane?
- " is a semi-permeable membrane?
- " is active transport?
- " are carrier molecules?

- Anything that has mass and takes up space
- A large molecule found in the nucleus of most cells
- Movement of molecules from a crowded area to a less crowded area
- Parts that make up matter
- The union of two or more atoms
- Molecules that store extra energy
- Two kinds of fat made by organisms
- Two hydrogen atoms and one oxygen atom
- Molecules that supply much of the cell's needed energy
- The smallest carbohydrates
- Sugars joined together
- The building blocks of cells
- The diffusion of water across a semi-permeable membrane
- A lack of water in individual plant cells
- A membrane that has small holes through which molecules can move
- A membrane that allows some, but not all, molecules to diffuse
- A process that pumps molecules from less crowded to more crowded areas
- Molecules in cell membranes that can pick up molecules from outside the cell membrane, pump them through the membrane, and release them on the inside.

PUZZLE Enchanted Box Puzzle

Chapter 2

Choose the word from the answer column which best completes each statement. Put the number of your answer for each lettered statement in the corresponding lettered square of the large "enchanted box." If you have chosen the correct answers, your box will be "enchanted," because each line of numbers—across, up, down, or diagonal will add up to the same number. Four answers will not be used.

STATEMENT

- An energy-releasing process
- A sugar-making process
- Structure where food is made in green plant cells
- During this process, materials in the cell's nucleus divide to form two nuclei.
- An organism's reaction to change
- A form of reproduction that occurs when the sperm cell and egg cell join
- Energy is used for _____ such as movement, growth, and reproduction.
- A form of asexual reproduction that occurs when an entire new organism grows from certain cells of the original organism
 - Carries the instructions for how the new cell should be built
- The simplest type of asexual reproduction
- Groups of similar cells that work together to perform similar jobs
- Tissues organized into more complex structures
- Besides making sugar, the process of photosynthesis gives off _____.
- Water and _____ are put together with energy from the sun to make sugar.
- Spinach diffuses into your blood stream in the form of _____ molecules.
- After energy is released from sugar, one waste product is carbon dioxide. The other waste is _____.

ANSWER COLUMN

- organism
- molecule
- mitosis
- sexual
- DNA
- sugar
- carbon dioxide
- organs
- life processes
- respiration
- tissues
- oxygen
- photosynthesis
- regeneration
- growth
- response
- chloroplast
- water
- fission
- energy

| | | | |
|----|----|----|----|
| A | B | C | D |
| 10 | 13 | 17 | 3 |
| E | F | G | H |
| 16 | 4 | 9 | 14 |
| I | J | K | L |
| 5 | 19 | 11 | 8 |
| M | N | O | P |
| 12 | 7 | 6 | 18 |

Enchanted number: 43