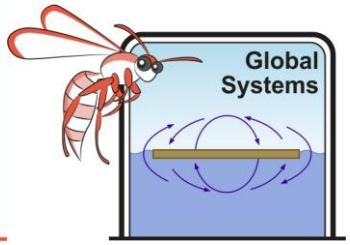
Global Systems – Teacher Review



M A T E R I A L S L L R D Z E
D R R E S E R V O I R E E C R
K E X E B W E A T H E R P O E
C F C E T L P H C V E U O N H
A S M O C A O A I H G T S D P
B N C Y M S W T P N N A I E S
D A C K P P I S T X A R T N O
E R E H P S O R D Y H E I S M
E T E T O I E S N C C P O A T
F R S P B E E C I Q S M N T A
E P H O T O S Y N T H E S I S
C R Y O S P H E R E I T I O P
M N E V A P O R A T I O N N O
N O I T A R I P S E R C N Y O
F K G N I R E H T A E W S J L

ATMOSPHERE
BIOSPHERE
CHANGE
CONDENSATION
CRYOSPHERE
CYCLE
DECOMPOSITION
DEPOSITION
EVAPORATION
FEEDBACK
HYDROSPHERE
LITHOSPHERE
LOOP
MATERIALS
PHOTOSYNTHESIS
POSITIVE
RESERVOIR
RESPIRATION
SCIENCE
TEMPERATURE
TRANSFER
WATER
WEATHER
WEATHERING

Major concepts covered

1. Name the four major spheres through which global systems cycle materials and energy.

   Atmosphere, Hydrosphere, Lithosphere and Biosphere

2. To which sphere does the cryosphere belong? It is the frozen part of the hydrosphere

3. What is the name for the long-term storage location from which materials are moved?

   Reservoir or sink

4. To maintain balance, what two things must be balanced in a cycle?

   Inputs must balance outputs

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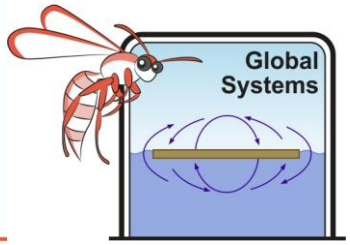

5. What is the name for a process that may cause materials to be rapidly moved causing imbalance?

   A forcing factor

6. By which process do plants release carbon dioxide into the atmosphere?

Respiration

7. By which process do plants take carbon dioxide from the atmosphere?

Photosynthesis

8. Name a long term and a short term carbon sink.

   Long term Fossil fuel, carbonate rock Short term Atmosphere or a weed

9. What is the difference between climate, weather and seasons?

Weather is measured over hours or days

Seasons are measured over months

Climate is measured over tens of years

10. How can understanding the science behind global systems help us make good decisions at this time?

Our climate appears to be changing rapidly. Using science understandings we can make good decisions as to whether it is changing, how it is changing, what things may be the forcing factors and how to deal with these changes.