**Chapter 3 “The Biosphere”**

**3.4 Cycles of Matter**

1) The Earth does not receive a steady supply of new matter from space. Matter is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Define **biogeochemical cycles.**

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3) Describe and give examples of biological processes.

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4) Describe and give examples of geological processes.

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5) Describe and give examples of chemical and physical processes.

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6) List 6 ways the humans affect cycles.

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7) On a separate piece of paper copy the figure of the **water cycle** on pg. 69 (include the descriptions in the boxes).

8) List the compounds that carbon is a major component of.

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9) On a separate sheet of paper copy the **carbon cycle** on pg. 70 (include the information in the boxes).

10) Describe three reservoirs of carbon.

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11) What do organisms need nitrogen for? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12) What is the most common form of nitrogen? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13) Define nitrogen fixation.

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14) Describe the cycling of nitrogen through producers, consumers, and decomposers.

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15) Define **denitrification.**

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16) How do human contribute nitrogen to the cycle?

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17) What do organisms need phosphorus for?

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18) Where is phosphorus found in the environment?

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19) How do producers and consumers get phosphorus?

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20) Define **primary productivity.**

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21) Define **limiting nutrient.**

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22) Describe what happens when there is too much phosphorus in a fresh water ecosystem.

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