

Cycles-Never Ending Science

Materials

- For the opening water cycle demo: 2 beakers, plastic wrap, rubber band, lamp, ice
- Student Materials (per student): scissors, 2-3 colored pencils (green and 2 others), Student Handout (see last page), glue

Procedure:

1. Warm up with the water cycle. Have students apply the water cycle to a beaker of warm water covered with plastic under a lamp, and another with ice water (the cycle is going in reverse between the 2 beakers).
2. Have students cut their Handout on the dotted lines.
3. Transition into Nitrogen with the 100 circles illustration- 78% of what you breathe is N. But it's not usable in that form to plants.
4. Title the center of the paper-"The Nitrogen Cycle".
5. On the top of the large paper put the statement about how lightning makes Nitrogen usable to plants.
6. Set up one of the smaller papers:
 - a. Fold in down in half
 - b. Draw a plant on the front
 - c. On the inside write how plants absorb the Nitrogen that lightning makes available
 - d. Glue down to the left of the title
7. On the other smaller paper:
 - a. Fold down in half
 - b. Draw a cow on the front
 - c. On the inside write how animals eat the plants and their waste puts N back into the soil
 - d. Glue down to the right of the title
8. Draw arrows going between the plant and animals "foldy".
9. One more statement at the bottom- "Nitrogen is transferred repeatedly..."