Shrinky Dink Cell Directions

Materials provided at school
- Shrinkable plastic sheets
- Scissors
- Paper punches
- String or key chain loop
- (6) 3 x 5” index cards cut in half (you will have a total of 12 cards)

Materials provided from or at home
- Sharpies or other permanent colored markers (student provides)
- Brown paper grocery bag (student provides)
- Oven with adult supervision

Step 1  On the rough side, use a black colored sharpie to trace the organelles on sheets of shrinkable plastic. Color each organelle with a different colored sharpie; however, use the same color for the organelle in both the plant and animal cell. For example, if you color the mitochondria red in the plant cell, also color the mitochondria red in the animal cell.

Step 2  Cut out your plant cell and animal cell with sharp scissors, leaving the edges as smooth as you can.

Step 3  Use a 1/8-inch paper punch to make holes in shapes for adding hanging loops. You must punch holes before baking the Shrinky Dinks.

Step 4  Preheat the oven to 325 degrees. Line a regular cookie sheet (not one with an insulating air layer) with brown paper cut from a clean paper grocery bag. To make it easier to remove the paper after baking, turn one corner of the brown paper up.

Step 5  Lay your Shrinky Dink objects, colored-side up, on the paper-lined cookie sheet. Leave space between the pieces so they don’t overlap.

Step 6  Put the cookie sheet in the preheated oven, and bake the Shrinky Dinks for 1 to 3 minutes. Watch them as they bake; the shapes will first soften and curl up at the edges, and then settle back down as they shrink. Once the pieces flatten out again, let them bake for another 30 seconds.

Step 7  Remove the cookie sheet from the oven, and carefully lift off the brown paper lining with your Shrinky Dinks. Press each shape with a folded piece of brown paper for 30 seconds, until they are cool enough to handle. At this point you have about 2 minutes when the shapes are still warm enough to further flatten them if needed.

Tips & Warnings
If you don’t like the way a molded design turns out, or if the plastic cools and hardens too quickly, you can put it back in the oven for 2 to 3 minutes to reflatten it and then twist or shape it again.

Do NOT use a microwave oven when baking Shrinky Dinks. Only a conventional or a toaster oven will shrink your shapes.

Watch the shapes as they bake and don’t allow them to curl so tightly that they stick to themselves. If this happens, carefully open the oven door and use a chopstick or a small blunt knife to unstick the shapes and flatten them.
Step 8  **Make Index Cards Key** (cards provided in class)

Step 1 Hole Punch
- On a 3 x 5” index which has been cut in half, hole punch the left-hand corner of the plain side.

Step 2 Make Title Card and Grading Card
- Make a **title card** for your first card with the following: Shrinky Dink Cell, name, date, and period.
- Label the next card: **Shrinky Dink Cell Grade** (leave room for your grade!)

Step 3 Make 10 Shrinky Dink Cards
- On the **plain side of your card**, write the **name** of the cell **organelle** and **draw** it as depicted in your shrinky dink model. Print neatly and erase any mistakes completely. Points are deducted for neatness.
- Using **colored pencil**, follow the **same color coding** as in your shrinky dink. Color within the lines with no white showing.
- On the lined side, write the organelle’s **function**. Write neatly.
- Put the following organelle cards in this order:
  1. Mitochondria
  2. Nucleus
  3. Endoplasmic reticulum
  4. Ribosomes
  5. Golgi complex
  6. Lysosome
  7. Vacuole
  8. Membrane
  9. Cell Wall (plant cell)
  10. Chloroplasts (plant cell)

**Grading – 100 points**
- On time – **5 points deducted for each day late**
- Followed the directions
- Shrinky dink cells and cards are secured together and does not come apart
- Has title card, grading card, 10 organelle cards with specified information
- Cards are in the correct order
- Cards are printed neatly and readable (no extra marks, complete erasers)
- Index cards are color coded to match shrinky dink cells
- Card organelles are drawn similarly to organelle on shrinky dink cell
- Organelle function is accurate