



Working on the wearable

Depending on the length of your class periods, I generally allow two 45 minute classes to draw, label, and paint the actual wearable.

Give each student a **plan sheet** with the cell lettering and microscope and have them draw their cell design in the space provided. Students should neatly color the sheet as they envision their painted wearable. I always make extra copies of the plan sheet available so students can try various design and color combinations. Note: Keeping the plan sheet on hand is vital throughout the project. As a student completes the project and is ready for it to be graded, I check their cell model and write the grade on the plan sheet which I collect for recording purposes.

Supplies: (based on class of 24):

- 12 fine and/or extra fine black sharpie markers for outlining and labeling,
- Fabric or permanent sharpie markers in assorted colors
- 24 pieces of butcher paper or wax paper
- 48 jumbo paper clips
- 24 hangars
- *Optional:* Want to add some “glitz” to your design? After completing your project, allow students to use paint brushes to add crystal paint. You can buy Tulip CRYSTALS dimensional fabric paint at Walmart or any hobby store. You will need a few extra items if you decide to use CRYSTALS.
 - Paintbrushes,
 - Small cans for rinsing brushes (I use an empty vegetable can and only fill 1/3 with water),
 - Paper towels or cloth rags for drying brushes

Steps

1. Distribute the shirts, according to size ordered. If you have ordered aprons, no need to worry about sizes.
2. Immediately instruct students to print first and last name on the inside bottom seam of the shirt with a sharpie. Aprons can be signed on the corner.
3. Give each student a piece of white butcher paper that will fit inside the shirt. This prevents the marker from bleeding through to the back side. (Note: Check to see if your school has a surplus of book covers. These work well to put inside the shirt. You can also use wax paper, poster board, old file folders etc.)
4. Demonstrate how to paper clip the wearable and paper together to prevent the paper from sliding out when hung to dry. Have students smooth the wearable on a flat surface (table).
5. Using their plan sheet as a reference, have students draw (or trace) their cell model onto the shirt.
6. Color the model with fabric markers.

Optional: CRYSTAL Painting—Squeeze out some crystal paint onto a piece of wax paper or foil. Use a paint brush to add a thin layer of paint over the area you want to sparkle. (A word of advice: You may want to monitor the amount. Some get a bit carried away with the paint.) Rinse the paint brush in water and dry. (Paint that is allowed to dry on the bristles will ruin the brush so it cannot be reused.) Have paper towels available at each table for drying brushes and water drips.



Optional: Since not everyone will finish at the same time, suggest to students who may complete the project early to come up with a cell slogan or joke to add to the back side of the shirt. One student designed a cell mitosis shirt and put “See you later...gotta split!” on the back side! Or how about, “Adios Amoeba”! If you have a computer available you will be amazed at some of the cell jokes and fun facts they can find.

Care and Cleaning

When “painting” with sharpies on cotton blend T-shirts, allow the ink in the sharpie to thoroughly dry. A minimum of 48 hours drying time is recommended. To set the ink, and prevent it from bleeding, place a clean white cloth over the entire design and iron over the cloth on the highest setting the fabric can handle. Be sure to iron the entire design.

When you do need to wash your wearable project, wash separately in cold water on a delicate cycle. Use only a small amount of detergent, or no detergent, if possible. Dry immediately.