

ACTIVITY 1.2: Make a Paramecium pillow

This is not necessarily a “girl” activity. The middle school boys in my class were just as enthusiastic about making a pillow as the girls were!

SUGGESTION: If you are working with a group, you might want to consider having a few “designated sewers” (even be some adult help pulled in for the day) who can stitch quickly and efficiently.

NOTE ABOUT SIZE OF PILLOW: If you would like to make a pillow that is larger than the pattern provided here, this is very easy to do. Simply print this pattern, then cut it into three pieces and enlarge each piece (by the same percentage) using a photocopier or scanner. If you are using trim, measure around the outside of your new, larger pattern to find the length of the fringe. (HINT: Using the furry fabric is easier.)

You will need:

- A copy of each pattern page (on regular paper)
- Sharp sewing scissors (for cutting fabric)
- **Pins**
- Sewing machine, if possible (threaded with white thread)
- Two pieces of white cotton fabric (or cotton/poly blend) each measuring about 11” x 17” (30 x 45 cm)

NOTE: Do not use stretchy fabric.

SECOND NOTE: If you can find specialty fabric that looks shaggy (like cilia) you could make the reverse side of the pillow hairy—the real texture of a paramecium’s exterior. (Search for “SEM” images to see real photos.)

- White fringe trim for cilia around edge (unless you are using specialty fur on the back) 40” (100 cm)
- Fabric markers
- Iron, if needed for the fabric markers (read the instructions on the marker box)
- Polyfill (stuffing) for pillow
- Needle and thread for hand stitching the pillow shut after filling it

STEP 1: Cut out pattern pieces and tape them together.

STEP 2: Pin pattern to fabric and cut out paramecium pieces. (NOTE: If you are using fabric that has right/wrong sides, make sure your pieces are cut appropriately so that you have the right sides facing out.)

STEP 3: Use fabric markers to draw the cell parts. You can do this freehand, or you can place the pattern under the fabric and trace over the parts. If you have trouble seeing the pattern through the fabric, you could place them on a window so light comes through. The cell parts don’t have to look exactly like the pattern, so don’t be overly concerned about getting things “exact.” The color of the parts is up to the artist, as in real paramecia the parts aren’t colored at all. This is a piece of art so the artists are free to express themselves as long as the parts remain identifiable. If your markers require ironing, do this before proceeding to the next step.

If you want to label the cell parts (not necessary but nice to do if you want something to help you remember what all those things are) use a fine point black permanent marker. Sharpie No-Bleeds work very well for tiny letters. Fine point Sharpies work well for medium-sized lettering. Don’t use the standard size Sharpie—the tip is too large.

STEP 4: If you are using two pieces of flat fabric (no furry texture on the back piece) then you will be adding the fringe trim around the edge to represent cilia. Pin the fringe to the inside of one of the pieces of fabric so that the fringe is on the inside of the seam. You can tack it down with masking tape if you have trouble making it stay in place. Make sure the seam of the fringe goes all the way to the edge. Use a basting stitch and sew around the edge to secure the fringe to the fabric, then remove tape.

STEP 5: Place the two sides together (right sides together, wrong sides facing out) and pin in place. Carefully stitch a seam around the edge. The dashed line on the pattern shows approximately where the seam should be sewn. Leave a gap somewhere along the seam. This gap will be the hole through which you stuff the pillow in step 6.



STEP 4: You can use masking tape to help secure the fringe. You will also need to pin it around the edges.

STEP 6: Turn the pillow right side out. Use “polyfill” or your choice of stuffing to stuff the pillow. TIP: Don’t overstuff it. It will look better if you let the pillow be slightly flat, not totally round.

STEP 7: Use needle and thread to hand stitch the gap through which you stuffed the pillow.

A pillow with two flat sides should have fringe around the edges.

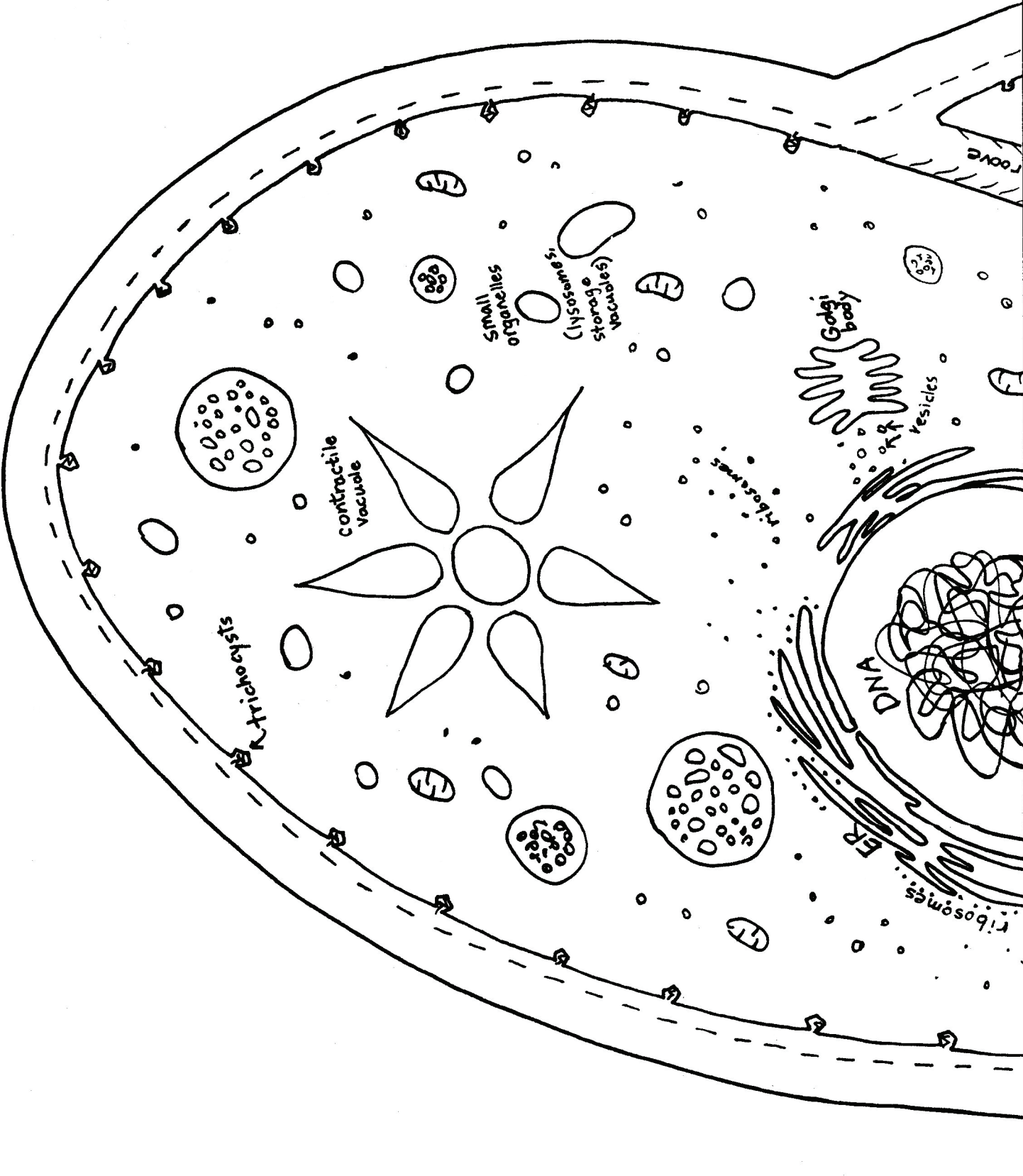


A pillow with a flat side and a furry side doesn't need fringe.



Remind students that the furry side represents the real texture of a paramecium, as seen in SEM images. The painted side represents what we see in TEM images and in compound (light) microscopes. Both are true, but unfortunately, it is impossible to see both at the same time.

PARAMECIUM PILLOW PATTERN -- top



PARAMECIUM PILLOW PATTERN -- bottom

