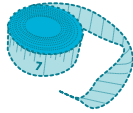


Tips for Chaperones

Magnifying Cells provides student problem-solving activities. Please make sure the students do the problem-solving, including how to measure, how to find the exhibits, and doing the math calculations.

Student roles:

- Think about and discuss solving the problem with each other.
- Develop a strategy with their group.
- Choose the appropriate tools.
- Compare their answers with other groups.
- Reflect: “How reasonable is my answer?”



Your job:

Ask:

- “Does it matter where you place your measuring instrument?”
- “What units are you using?”
- “Are some tools better than others for this task?”

Encourage:

- “Good thinking.”
- “How did you figure that out?”
- “Your group is really working well together.”
- “Are all of these words familiar?”
- “What part don’t you understand?”



Three to five students will use each backpack. Before you begin, go through the backpack with the students to find all of the materials:

- START HERE (Photo guide to exhibits. READ the scientist letter together.)
- pencil
- clipboard
- Toolkit bag with tape measure, ruler, calculator, hand lens
- vinyl envelope with microscope slides
- cell image transparencies (4)
- Task cards (There are 4 task cards.)

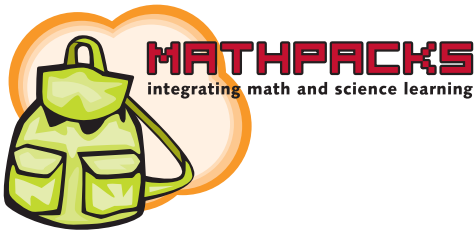
The task assignments are LEADERS for the tasks; students do not accomplish the task alone. Please make sure all students have the chance to do the measuring. Students should switch roles once.

Recorder: Read directions and record data on teacher-provided pages.

Equipment Handler: Choose appropriate materials from the backpack.

Measurement Master: Make sure all group members use measurement materials.

Location Expert/Navigator: will locate the spot for the activity



After students have completed the Cell Model activity, show them the Diplodocus on Level 3. Look down on it from the railing next to the Cell Model or from the bridge leading to the Collections Gallery.



If the cell model were as big as the Diplodocus skeleton (look down to the third floor) then the cell drawing would be the size of an SUV!

The cell model is one million times bigger than a human cell! If the human cell was as big as the period at the end of this sentence then the cell model would have to be as big as 10 Diplodocus skeletons lined up tail to nose and the cell drawing would have to be as big as 10 SUVs lined up bumper to bumper! Human cells are tiny!