

Solve a Cellular Mystery	Grade 8
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<h2 style="margin: 0;">Spot the Differences Post-Activity</h2>	Assessment	Assessment of Learning
	Cross-curricular	N/A

<p><b>Big Ideas</b></p> <p><b>Grade 8: Understanding Life Systems</b></p> <ul style="list-style-type: none"> <li>• Cells are the basis of life.</li> </ul> <p><b>Overall Expectations</b></p> <ol style="list-style-type: none"> <li>2. investigate functions and processes of plant and animal cells</li> <li>3. demonstrate an understanding of the basic structure and function of plant and animal cells and cell processes</li> </ol>	<p><b>Specific Expectations</b></p> <p>2.5 Use appropriate science and technology vocabulary, including <i>organelle</i>, <i>cell theory</i> and <i>membrane</i>, in oral and written communication</p> <p>3.2 Identify structures and organelles in cells, including nucleus, cell membrane, cell wall, chloroplast, vacuole, mitochondria, and cytoplasm, and explain the basic functions of each</p> <p>3.3 Compare the structure and function of plant and animal cells</p>
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**Description**  
 Using the PowerPoint presentation provided, students will play *Spot the Differences* to review their knowledge about animal and plant cells.

<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• <i>Spot the Differences</i> PowerPoint</li> </ul>	<p><b>Duration</b></p> <p>15 minutes</p>
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**Introduction**  
 This activity is meant as a review of the organelles of animal and plant cells. The assumption is that students have already been introduced to cells and organelles.

- Action**
1. Display the *Spot the Differences* PowerPoint on a screen in the classroom. You can have the whole class work together to complete the questions or print off slides 2 & 6 as worksheets.
  2. Get students to spot the 4 differences between the two images on Slide 2 (Answer: Slide 4).
  3. Ask students which one of the images they think is an animal cell and which is a plant cell. Why?
  4. Ask students to fill in the blanks on Slide 6 (Answer: Slide 8). You can give the students the following word bank:

- a. Vacuole
- b. Ribosome
- c. Endoplasmic reticulum
- d. Golgi apparatus
- e. Nuclear membrane
- f. Nucleus
- g. Cytoplasm
- h. Cell membrane
- i. Mitochondria
- j. Chloroplast
- k. Cell wall

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### **Consolidation/Extension**

Students can extend their knowledge of organelles by describing the function of each.

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