# Eclipse Logic Puzzle Pieces

<table>
<thead>
<tr>
<th>Cards:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALEX</td>
<td>ANNA</td>
<td>AMELIA</td>
<td>ALAN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clues:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture of First Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture of Bailey’s Beads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture of Diamond Ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture of Corona</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These clues describe the stages of an eclipse as the moon begins to cross the sun to totality. Alex’s picture comes first.

Who has which picture?  
Put the pictures in order.

Alex’s picture shows a dark bite out of the sun. The colors on earth begin to change as with sunset, getting grayer.

Who has which picture?  
Put the pictures in order.

Prominences are red flashes seen on the rim of the sun between second and third contact. Amelia’s picture is third.

Who has which picture?  
Put the pictures in order.

This picture is a beautiful and brief display of a single brilliant spot of light.

Who has which picture?  
Put the pictures in order.

This picture shows a chain of bright lights around the sun. This is the second event of the series. It comes before Alan’s picture.

Who has which picture?  
Put the pictures in order.

Alan’s picture shows the pearly white part of the sun not normally seen because of the blue sky. Daytime animals are getting ready to sleep.

Who has which picture?  
Put the pictures in order.
Eclipse Logic Puzzle – adapted by MJKrech

Objectives:
1. The students will review vocabulary related to solar eclipse.
2. The students will use logical thinking skills to solve the problem.
3. The students will use communication skills and interpersonal skills to obtain, share, and synthesize information.

Materials:
1. This takes about 15 minutes to prepare. Copy enough sets for five – seven small groups of about four students per group. Run off with different colored papers for each group.
2. Cut the paper pieces apart using a paper cutter. Put each set in a different envelope. Clip the clues separate from the eight cards. Keep the 4 photos out of the envelope.

Procedure:
1. Explain to the students that they will be working in groups to solve a mystery. The clues will be given to individuals in each group. There are special rules for this activity.
   a. You are not to show your clue to anyone. You must read it to the others and they must listen. You may need to read some clues more than once.
   b. Only ask the teacher a question if the whole group agrees that is is necessary.
   c. Everyone in the group gets to participate.
2. Explain that the problem that they are trying to solve is printed on the clue cards.
3. Break your students into groups of 4 to 6. Four kids seem to be more effective but since there are 6 clues, some students will need to take two clues.
4. Distribute the sets of clues, names, and words. The names and words are set in the middle of the table. The students must hold the clues so that no one sees them.
5. Give the students the signal to start. If you don’t usually do cooperative problem solving, expect some confusion at first. Then somehow, groups really get rolling. Monitor and encourage the groups; those that finish should not share their answer. It’s so much fun to figure it out on your own!
6. Hold a debriefing discussion. Questions might include:
   a. Did you need all the clues to solve the problem?
   b. Did you get stuck?
   c. How did you get unstuck?
   d. Which clue helped your group the best? Why?
   e. Was this enjoyable? Frustrating?

Answers: Alex & First Contact, Anna & Bailey’s Beads, Amelia & Diamond Ring, Alan & Corona
NOTE: You might want to run these off and hand them out about halfway through the puzzle so they can get a visual of these stages of a solar eclipse. I've never done this, but think it would be a great addition to the game! Then when they see the Solar Eclipse PowerPoint, they will already know these when they see them!