Transformation Puzzles

This pack includes free transformation puzzles that you can use to help your students learn about translating, rotating and reflecting irregular figures.

By Melinda Crean of Top Notch Teaching

Thank you for downloading my product.

I hope this item is all that you require for your students and classroom. If you have any questions, comments or feedback please email me at melinda@topnotchteaching.com.

Personal Use Only:
This product is copyrighted to © Top Notch Teaching 2014. You are able to use this product for your own classroom use or home use only.

No part of this publication shall be reproduced, transmitted, or sold in whole or in part in any form, without prior written consent of the author.
Transformation Puzzles

What is translation?
Translation is moving an object in a straight line. The object ‘slides’ a specific distance and in a specific direction. An example is when objects pass by on a straight conveyor belt.

What is rotation?
When an object is rotated it turns around a specific point and by a specific amount. An example is a windmill.

What is reflection?
When an object is reflected it means to move it as if it were seen in a mirror.
Transformation Puzzles

Instructions

1. Cut out the animal at the bottom of the page.
2. Trace around the animal in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

Example

1.

2.

3.

4.

5. Quarter turn to the right

3. Reflect right

4. Rotate quarter turn left

5. Translate down

6. Translate left

7. Rotate quarter turn left

8. Reflect left
## Transformation Puzzles

### Instructions
1. Cut out the animal at the bottom of the page.
2. Trace around the animal in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Transformations:

2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________
7. ______________________
8. ______________________
Transformation Puzzles

Instructions
1. Cut out the toy at the bottom of the page.
2. Trace around the toy in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

Transformations
2. ________________
   ________________
   ________________
   ________________
3. ________________
   ________________
   ________________
   ________________
4. ________________
   ________________
   ________________
   ________________
5. ________________
   ________________
   ________________
   ________________
6. ________________
   ________________
   ________________
   ________________
7. ________________
   ________________
   ________________
   ________________
8. ________________
   ________________
   ________________
   ________________
Transformation Puzzles

Instructions
1. Cut out the present at the bottom of the page.
2. Trace around the present in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

Transformations
2. 
3. 
4. 
5. 
6. 
7. 
8.
Transformation Puzzles

Instructions
1. Cut out the animal at the bottom of the page.
2. Trace around the animal in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

Transformations
2. ____________________
   ____________________
   ____________________
3. ____________________
   ____________________
4. ____________________
   ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
Transformation Puzzles

Instructions
1. Cut out the tree at the bottom of the page.
2. Trace around the tree in cell one, then move the template from cell to cell. You can move it by: translating, rotating or reflecting it in a way until you reach cell eight, the final position.
3. Write down each transformation on the lines to the side.
4. Swap your grids with a partner and try to work out the sequence of movements. Compare with the original to see how they are the same and how they are different.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Transformations
2. ___________________
3. ___________________
4. ___________________
5. ___________________
6. ___________________
7. ___________________
8. ___________________
Credits

For more teaching resources and ideas by Top Notch Teaching, check out the following links.

Top Notch Teaching TpT Store  Top Notch Teaching Blog Store  Top Notch Teaching Blog
Teaching Facebook  Top Notch Teaching Pinterest  Top Notch Teaching Twitter

Created using Artwork and Fonts by:

[Graphics from the Pond]
[Teacher Laura Kindergarten Adventures]