**Performance Assessment Task**

|  |
| --- |
| **Quilt Designer***In the 1840s, the industrial revolution brought dramatic changes to quilt making in North America. Commercial fabrics became affordable for ordinary people, and quilts made of repeated blocks became a favourite of quilt makers. Many traditional quilts from that era used line or rotation symmetry to add to their visual appeal, and symmetry remains a popular design feature with today’s quilters.* Today you will be trying your hand at this traditional art form. You will design a quilt block using a combination of squares, rectangles, triangles and/or other shapes of your choice. Your block should use at least 3 different colours.Once you have designed your quilt block, you will use it to create 2 larger quilt designs, each made up of at least 2 rows and 2 columns of blocks.* Quilt 1 will demonstrate **line symmetry.**
* Quilt 2 will demonstrate **rotation symmetry.**

**Now for the challenge:** Using your quilt designs, you will create a product or presentation to help someone new to our class understand the concepts of line and rotation symmetry. * To help explain the concepts, you might use diagrams, photographs, video, physical copies of the block to manipulate, or animation.
* Your project might take the form of a PowerPoint or other digital presentation; a poster, pamphlet or display; a short video webcast; or another project approved by your teacher.

Remember that through your project you will demonstrate your understanding of line and rotation symmetry as you:* **Classify** Quilt 1 according to **lines of symmetry**.
* **Identify order and angle of rotation symmetry** in Quilt 2.
 |

**Optional Student Page: Quilt Designer**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quilt block design**

 Note: Blocks are often (but not always) square.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Checklist and Rubric: Quilt Designer**

Student \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Description of Criteria** | **Yes** | **Not Yet** | **Teacher Comment** |
| **Classify a given design according to lines of symmetry**(Shape and Space 5)(Transformations) | * Quilt 1 demonstrates line symmetry
 |  |  |  |
| * Quilt 1 is correctly classified according to lines of symmetry
 |  |  |
| **Identify order and angle of rotation symmetry in a given design**(Shape and Space 5)(Transformations) | * Quilt 2 demonstrates rotation symmetry
 |  |  |  |
| * Order and angle of rotation symmetry for Quilt 2 are correctly identified
 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   Level  Criteria | Excellent |  Proficient | Adequate | Limited \* | Insufficient/ Blank \* |
| Explain line symmetry(Shape and Space 5)(Transformations)[CN, R, V] | Explains the concept of line symmetryin a **precise** and **skillful** manner. | Explains the concept of line symmetryin a **logical** and **effective** manner. | Explains the concept of line symmetryin a **simplistic** and **predictable** manner. | Provides an **inaccurate** and **ineffective** explanation of the concept of line symmetry. | No score is awarded because there is insufficient evidence of student performance based on the requirements of the assessment task. |
| Explain rotation symmetry(Shape and Space 5)(Transformations)[C, PS, R] | Explains the concept of rotation symmetryin a **precise** and **skillful** manner. | Explains the concept of rotation symmetryin a **logical** and **effective** manner. | Explains the concept of rotation symmetryin a **simplistic** and **predictable** manner. | Provides an **inaccurate** and **ineffective** explanation of the concept of rotation symmetry. |

* When work is judged to be limited or insufficient, the teacher makes decisions about appropriate intervention to help the student improve.