Name:

Date:

School:

Facilitator:

11.03 Explore Spheres

Total points: 33

**Use the link on the task page to complete this task.**

**The figure on the left (red) is a circle. The figure on the right (blue) is a sphere. They have equal radii, which you can adjust using the slider.**

1. Adjust the slider to adjust the radius of each figure. As you change the radius, note the area of the circle and the surface area of the sphere. Fill in the chart below.

|  |  |  |
| --- | --- | --- |
| **Radius ( r )** | **Area of Circle**  **with Radius ( r )** | **Surface Area of Sphere**  **with Radius ( r )** |
| 2 in. |  |  |
| 3 in. |  |  |
| 4 in. |  |  |
| 5 in. |  |  |
| 6 in. |  |  |

# Can you make a conjecture about the relationship between the area of a circle with radius, *r* , and the surface area of a sphere with the same radius, *r*? How are they related?