Accelerated Geometry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cross Sections Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Illustrate the way in which each figure would have to be sliced to obtain the given cross section.

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| Cube: How would you slice each cube to get cross sections shaped like a square, triangle, rectangle and trapezoid?  | Square Pyramid: How would you slice each pyramid to get cross sections shaped like a triangle, square, and trapezoid?  |
| Triangular Pyramid: How would you slice each pyramid to get cross sections shaped like two different types of triangles?  | Sphere: How would you slice each sphere to get cross sections shaped like a circle or a great circle?  |
| Cylinder: How would you slice each cylinder to get cross sections shaped like a circle or a rectangle?  | Cone: How would you slice each cone to get cross sections shaped like a circle or a triangle?   |

Sketch and state the figure that is the cross section described for the given figure and stated plane.

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| 1. Passing through the center | 2. Parallel to the base | 3. Parallel to the base |
| 4. Parallel to the base | 5. Parallel to the base (the pentagon is the base)  | 6. Passing through the top with a horizontal plane |
| 7. Perpendicular to the base passing through the vertex | 8. Perpendicular to the base | 9. Perpendicular to the base passing through the vertex |
| 10. Parallel to the base | 11. Parallel to the base | 12. Perpendicular to the base (the pentagon is the base)  |
| 13. Parallel to the base | 14. Perpendicular to the base | 15. At an angle with the base and passes through both the front and back sides of the figure |