Name:

Starfish Embryo Development Lab

**Purpose:** To examine the stages of embryo development in a starfish.

**Materials:** Compound Light Microscope

Prepared Slides

**Procedure:** Obtain slides of various stages and draw the following stages under power:

* Zygote
* 2 cell
* 8 cell
* Morula
* Blastula
* Early Gastrula
* Late Gastrula

Title and color each slide. Label germ layers **when visible**. How big is the gastrula in millimeters and micrometers?

**Conclusion Questions:**

1) What is the scientific name of the starfish?

2) Define Fertilization and Zygote.

3) In which stage would you find stem cells?

4) What is a stem cell?

5) Describe the process of gastrulation.

6) What is differentiation and at what stage does it occur.

7) Identify the 3 germ layers and list 2 structures that form from each.

8) Compare starfish embryo development with that of a human embryo. What are the differences and similarities?

Use the rectangles below and on the next page to draw your diagrams.