



Name: \_\_\_\_\_

## Model Life Support System

In this activity, your group will design and construct a model closed system (like the International Space Station) that will be monitored using the sensor technology explored during the project. In this model, ONLY the humidity sensor will be used.

Your group will need to follow a Design & Build process to plan, construct and test your model.

### Design Criteria

1. The model should be no larger than 30 cm x 30 cm x 30 cm.
2. The model should have at least one transparent side.
3. The model needs to contain a living plant of your choice in a small pot.
4. The humidity sensor needs to operate INSIDE the model. The 'alarm' can be outside of the model.
5. The sensor needs to trigger an 'alarm,' which may be a light, buzzer, etc., when the humidity is outside of the 'optimal' range.
6. Your group will need to code a computer program to run the humidity sensor and have the 'alarm' triggered when appropriate.
7. Your group will need to submit a labelled diagram of your model as well as demonstrate how your model works to the class.