

# Pipe Project: Space Station

## Junior Level

| Specifications                                                                                                                    | Study Club Value |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------|
| Construct a space station using the pipes and fittings to connect six houses. Each house must have its own access to the outside. | \$.02            |
| Use the Pipe Parts worksheet to determine the cost of the pipes and fittings for your space station.                              | \$.03            |

## Intermediate Level

| Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Study Club Value |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Construct a space station using the pipes and fittings to connect from 6 to 8 houses according to the following specifications: <ul style="list-style-type: none"><li>You must be able to go to each house in the space station without having to go outside.</li><li>Half of all of the houses in the space station must have access to the outside.</li><li>Each outside access must use a coupling joint.</li><li>All modules must be connected to the passage pipes using a 2" pipe part.</li></ul> | \$.04            |
| Use the Pipe Parts worksheet to determine the cost of the pipes and fittings for your space station.                                                                                                                                                                                                                                                                                                                                                                                                    | \$.06            |

## Senior Level

| Specifications                                                                                                                                                                                                                                                                                                                                                                                             | Study Club Value |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Draw a plan for a space station that uses no more than \$20.00 worth of pipes and fittings to connect as many houses as you can according to the following specifications: <ul style="list-style-type: none"><li>You must be able to go to each house in the space station without having to go outside.</li><li>Half of all of the houses in the space station must have access to the outside.</li></ul> | \$.10            |

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| <ul style="list-style-type: none"> <li>Each outside access must use a coupling joint.</li> <li>All modules must be connected to the passage pipes using a 2" pipe part.</li> </ul> |                                                                                                          |
| Use the Pipe Parts worksheet to determine the cost of the pipes and fittings for your space station.                                                                               | \$.05                                                                                                    |
| Construct the space station according to your plan.                                                                                                                                | \$.05 plus a bonus of \$.01 for each house that you are able to connect according to the specifications. |