## Pipe Project: Pentagon Skyscraper

## Junior Level

Specifications	Study Club Value
Use the pipes and fittings to make a structure according to the following specifications:  • The structure must be able to stand without falling	\$.02
<ul> <li>The structure must be able to stand without failing over.</li> <li>The structure must be at least 4 feet tall.</li> <li>The structure must have a pentagon at each end.</li> </ul>	
Use the Pipe Parts worksheet to determine the cost of the pipes and fittings for your structure.	\$.03

## Intermediate Level

Specifications	Study Club Value
Use the pipes and fittings to make a five-sided structure according to the following specifications:	\$.04
<ul> <li>The structure must be able to stand without falling over.</li> <li>The structure must be 4 and ½ feet tall.</li> <li>The structure must stand with no more than three pipes touching the floor.</li> </ul>	
Use the Pipe Parts worksheet to determine the cost of the pipes and fittings for your structure.	\$.06

## Senior Level

Specifications	Study Club Value
Draw a plan for a five-sided structure according to the following specifications:	\$.10
<ul> <li>The structure must be able to stand without falling over.</li> <li>You must use no more than \$30.00 worth of pipes and fittings.</li> <li>You must design you structure to be as tall as possible while remaining within your budget.</li> </ul>	
Use the Pipe Parts worksheet to demonstrate that your structure can be made for no more than \$30.00.	\$.05
Construct the structure according to your plan.	\$.05 plus a bonus of \$.01 for each foot of height.