

# Lesson Plan Form

Day and Date: Week of 11-4 Universe's Secrets



Staff Member(s) Leading Activity: John B. DORTHA

## Think About It:

Activity Title/Description:

Space Elevator

Skills children will accomplish:

Cooperation Engineering Gettin' super tall

Which STEAM skills can be applied?

Child's Role in the Activity  
(e.g., Leadership/Participant)

Builder

Is additional staff needed? If so, describe.

Yes/No Staff needed for tower

Space Needed

Stairwell/Caf

Activity will work in multiple spaces?

Yes/No

Materials Needed?

Knex String ~~Knex~~ Knex motor

Activity Introduction/ Sell It:

The simplest but most difficult idea for easy space trips, lets see how high we can get

Activity Directions:

Step-by-step description including rules and procedures. Continued back of form.

1. Build some structurally sound reference pieces out of Knex  
Use string + motor to create a pulley system for top of tower
2. Start to build up tower. Tower must support motor + pulley system.
3. Test regularly by trying to pull up "spaceship" through tower

Think About It:	
Activity Directions continued	
4. <i>Suggestions:</i>	<i>• build the pieces horizontally before setting vertical</i>
5.	<i>• use tape + cardboard to firmly ground the lower</i>
6.	
7.	
Wrap up- Discuss activity highlights, benefits, successes, take aways	
Activity Duration:	
What pitfalls might you expect?	
How would you remedy them?	
Evaluate the activity –	
What went well?	
What modifications would you make next time?	