# Spinning Tops

## Performance and Learning Targets Linked to the Activity and the Eight Next Generation Science Practices

Observe the suggested student behaviors while working with the activity. Either use the suggested Emerging (E), Developing (D), Proficient (P), Accomplished (A) proficiency level descriptions or use one relevant to your context.

## Student Performance Targets Linked to the Activity

### To what degree can the student...?

- **Adequately build the Spinning Tops model with help or independently using the Building Instruction (1, 2, 3, 6)**
- **Use the model to demonstrate understanding of terms and make predictions about cause and effect (1, 3, 5)**
- **Meet or exceed expectations in the design of the Spinning Tops based on directions of activity (E.g. Handle must turn, Wheel must spin away from the handle, Gears must mesh) (2)**
- **Make changes or create a new model design in order to create a more advanced model based on tests and data (2, 3, 4, 6)**
- **Use Spinning Tops worksheets to record and analyze data collected from the model investigation (3, 4, 5)**

## Selected Student Learning Targets Linked to the Practices

### To what degree can the student...?

- **Ask simple to advanced questions based upon observations to make predictions (1, 3)**
- **Demonstrate ability to use fair testing of models and make adjustments based upon data (3, 4, 6)**
- **Communicate the meaning of the findings with others (E.g. orally, in drawing or writing) (4, 8)**
- **Follow a plan to define, carry out, test, evaluate and share a design task (2, 3, 4, 5, 6, 7, 8)**
- **Compare solutions with other groups and listen to the ideas of others (6, 7, 8)**

## Optional Student Learning Targets


## Lesson Observational Notes: