Module 7.0

Name: _____

Force of a Golf Swing

GRADES 3-5

Experimental Guide: Balanced and Unbalanced Forces

Question: How can you increase the distance a golf ball travels?

answer here

Hypothesis: If I answer here _____,
then the distance of the golf ball will increase because

answer here

Variables: answer here

Independent (check one):

☐ **Foot position** ☐ **Follow-through** ☐ **Type of club** ☐ **Height of the tee**

☐ **Angle of swing** ☐ **Speed of the swing** ☐ **Clubhead speed**

Dependent: Distance of the ball.

Control: What other variables will you keep the same?

answer here

Experiment Design: Briefly summarize how you will collect your data.

answer here

Name: _____

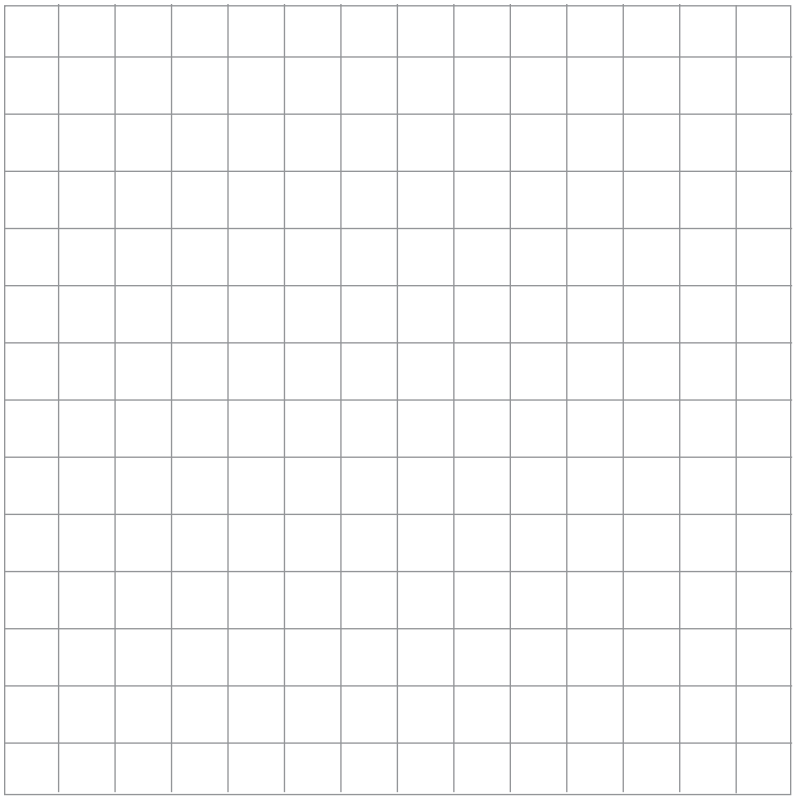
Force of a Golf Swing

GRADES 3-5

Data: Record the distance in feet for 5 trials.

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
Control (no changes)	answer here	answer here	answer here	answer here	answer here
Independent variable	answer here	answer here	answer here	answer here	answer here

Analyze: Find the average distance for both the controlled and changed swing and graph your average data comparing the two distances.



Name: _____

Force of a Golf Swing

GRADES 3-5

Report: Answer the following questions.

Did your data support your hypothesis?

answer here

How did you change (independent variable) the distance of the ball?

answer here

How do you know your change (independent variable) influenced the distance of the ball?

answer here

How did your change (independent variable) create an unbalanced force on the ball?

answer here

Name: _____

Force of a Golf Swing

GRADES 3-5

Experimental Guide: Energy and Speed

Question: How can you increase the energy of a golf ball?

answer here

Hypothesis: If I answer here _____,
then the distance of the golf ball will increase because

answer here

Variables: answer here

Independent (check one):

☐ **Foot position** ☐ **Follow-through** ☐ **Type of club** ☐ **Height of the tee**

☐ **Angle of swing** ☐ **Speed of the swing** ☐ **Clubhead speed**

Dependent: Speed of the ball.

Control: What other variables will you keep the same?

answer here

Experiment Design: Briefly summarize how you will collect your data.

answer here

Module 7.0

Name: _____

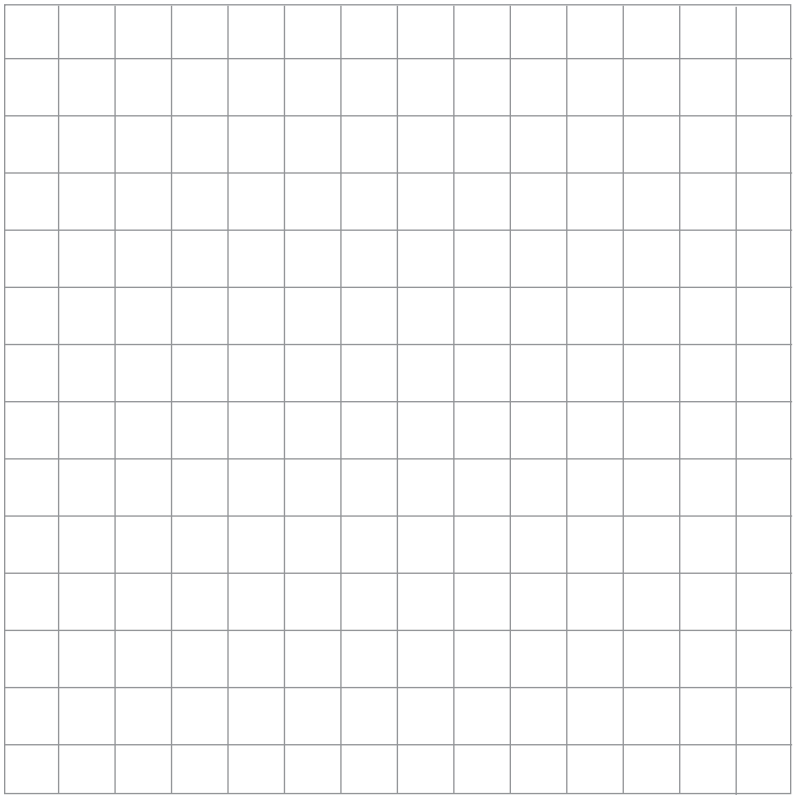
Force of a Golf Swing

GRADES 3-5

Data: Record the distance in feet for 2 trials.

	Trial 1 Distance	Trial 1 Time	Trial 1 Speed (D/T)	Trial 2 Distance	Trial 2 Time	Trial 2 Speed (D/T)	AVG
Control (no changes)	answer here	answer here	answer here	answer here	answer here	answer here	answer here
Independent variable	answer here	answer here	answer here	answer here	answer here	answer here	answer here

Analyze: Find the average distance for both the controlled and changed swing and graph your average data comparing the two speeds.



Name: _____

Force of a Golf Swing

GRADES 3-5

Report: Answer the following questions.

Did your data support your hypothesis?

answer here

How did you change (independent variable) the energy of the ball?

answer here

How do you know your change (independent variable) influenced the energy of the ball?

answer here

Describe the collision between the ball and the club. How did the collision change in your experiment?

answer here