

MOTION AND SIMPLE MACHINES


Grades 3-6

STUDENT JOURNAL


This journal belongs to:



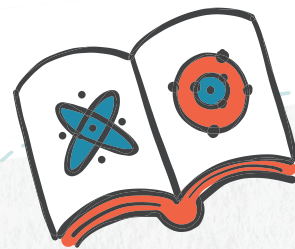
THE GOOD AND THE BEAUTIFUL



Motion and Simple Machines



LEVEL 3-6 STUDENT JOURNAL



©2022 JENNY PHILLIPS | GOODANDBEAUTIFUL.COM

No part of this PDF document may be copied or reproduced for anyone outside your family or school group of eight children or fewer. If you are using this document for a school group, you must purchase a copy for each set of eight children in the class.



INSTRUCTIONS

This student journal accompanies *The Good and the Beautiful Motion and Simple Machines* science unit. It contains all the worksheets and journal pages that are needed to complete the unit. Each student will need his or her own copy of the science journal.

Have each student take his or her time to create high-quality work as the activities and worksheets are completed. Students may enjoy looking back on their past discoveries when they've finished.

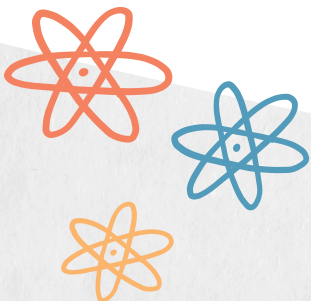
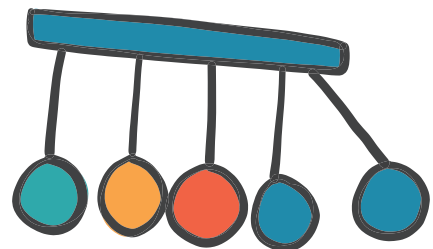




TABLE OF CONTENTS

Lesson 1. . . . .	.4
Lesson 2. . . . .	.7
Lesson 3. . . . .	.8
Lesson 4. . . . .	.9
Lesson 5. . . . .	.11
Lesson 6. . . . .	.12
Lesson 7. . . . .	.13
Lesson 8. . . . .	.15
Lesson 9. . . . .	.16
Lesson 10. . . . .	.18
Lesson 11. . . . .	.19
Lesson 12. . . . .	.20



Isaac Newton

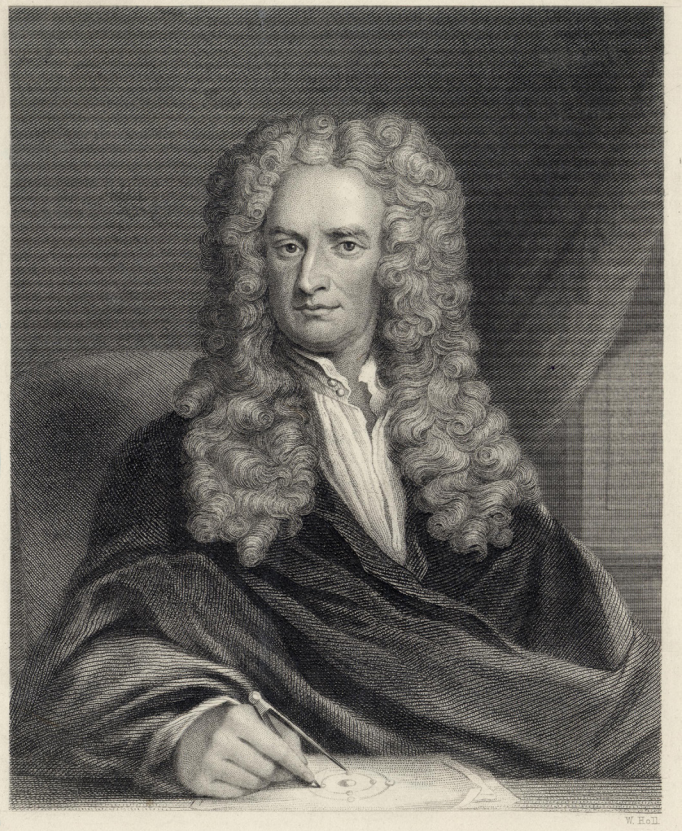
Lesson

1

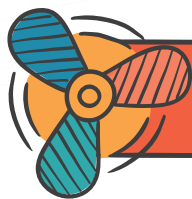
Directions: Cut and paste the quote from Isaac Newton (found on the bottom of the page) in the space provided below.

Directions: Draw or write two things you learned or loved about Isaac Newton from the video.

--



“I believe the more I study science,
the more I believe in God.” —Isaac Newton



Newton's First Law

An object in motion stays in _____ ; an _____ at rest stays at _____ until _____ upon by a _____.

Word Bank

rest

force

object

acted

motion

ACTIVITY #1

Write or draw what happened when the card was flicked:



ACTIVITY #2

Write or draw what happened when the penny was flicked:



Speed & Velocity



How long does it take
a ball to roll 4 feet?

Time: _____

DEFINITION MATCH

Match the term to the correct definition.

Distance:

the rate at which an object travels in a certain amount of time

Speed:

the speed and direction of an object

Instantaneous
Speed:

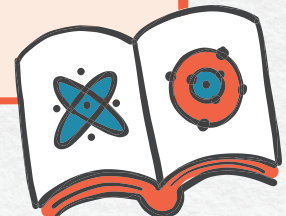
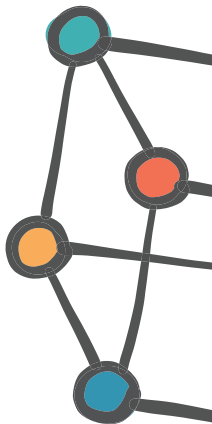
any change in direction and/or speed, either faster or slower

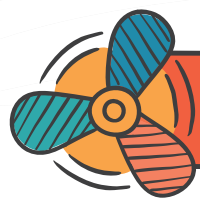
Velocity:

the speed of an object at a specific instant in time

Acceleration:

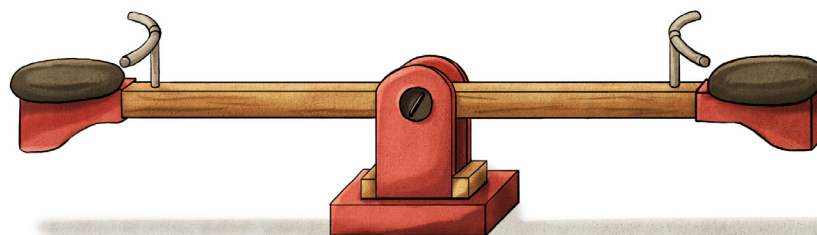
how much ground has been covered during the movement of an object





Newton's Second Law

$$\square = \square \times \square$$



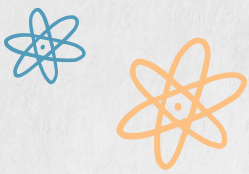
Directions: Cut out the words at the bottom of the page. Place and then glue them in the correct order to create the definition for Newton's Second Law.

Word Bank Cutouts

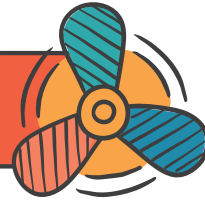
the greater
to
an object
of
will

the mass
it
force
the greater

the object
need
accelerate



Gravity



DROPPING DIFFERENT BALLS EXPERIMENT

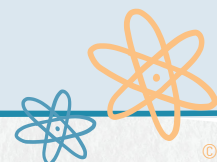
My hypothesis:

The outcome:

Gravity is a _____ of attraction between _____ masses.



Other notes:





Newton's Third Law



Directions: Find the hidden message by coloring all the letters in the puzzle below in **red** and all the numbers **blue**. Then read the hidden message in **red**.

1	8	W	H	E	N	6	3	5	4	A	N	2	1	7
3	6	O	B	J	E	C	T	2	6	9	P	U	S	H
E	S	8	2	6	7	T	O	W	A	R	D	1	3	5
A	N	O	T	H	E	R	9	1	5	3	O	B	J	E
C	T	8	9	1	T	H	E	2	9	1	8	3	O	B
J	E	C	T	2	5	1	8	7	B	E	I	N	G	6
8	2	7	A	C	T	E	D	1	9	5	2	4	7	9
2	U	P	O	N	1	8	7	P	U	S	H	E	S	5
2	8	9	5	4	2	8	6	4	B	A	C	K	7	3
1	3	2	W	I	T	H	5	6	4	8	7	E	Q	U
A	L	1	5	7	6	9	3	F	O	R	C	E	8	1

Examples of Newton's Third Law:





"Native American Bow Hunting"
by Hamilton Irving Marlatt (1867-1929), 1915

Lesson

7



I SPY: WEDGES AND LEVERS



Circle all the wedges in **red** and all the levers in **blue**.
NOTE: Four items can be circled for both types of simple machine.



Draw or list the simple levers you see around you.

Wheel and Axle

Inclined Plane

