

Balancing Forces

Balancing Forces - “Short on Time” (27 Days, 30 Minutes): Click [here](#) for instructional minutes and lesson adjustments.

Chapter 1: Why does the train rise?

- I can explain that a force is a push or a pull that can make something start moving.
- I can use evidence from my observations to show that a force acts between two objects.
- I can write and explain how a force makes the floating train rise.

Day One Lesson 1.1 Activity T Lesson 1.2 Activity T, 1	Day Two Lesson 1.2 Activity 2, 3	Day Three Lesson 1.3 Activity 1, 2, 3	Day Four Lesson 1.4 Activity T, 1
Day Five Lesson 1.4 Activity 2, 4			

Chapter 2: Why does the train rise without anything touching it?

- I can explain that some forces can act without touching, like magnetic forces.
- I can investigate and gather evidence to show what magnets attract or repel.
- I can use diagrams and observations to explain why the train rises using magnetic force.

Day Six Lesson 2.1 Activity 1, 2	Day Seven Lesson 2.3 Activity 1, 2	Day Eight Lesson 2.3 Activity 3, 4	Day Nine Lesson 2.4 Activity 1, 2, 3
Day Ten Lesson 2.5 Activity 1, 2	Day Eleven Lesson 2.5 Activity 3, 4		

Chapter 3: Why does the train fall?

- I can explain that gravity is a force that pulls objects toward Earth.
- I can investigate and show how touching forces, magnetic forces, and gravity act on objects.
- I can use diagrams and evidence to explain and model why the train falls.

Day Twelve Lesson 3.1 Activity 1, 2, 3	Day Thirteen Lesson 3.2 Activity 1, 2	Day Fourteen Lesson 3.3 Activity 1	Day Fifteen Lesson 3.3 Activity 2
Day Sixteen Lesson 3.4 Activity 1	Day Seventeen Lesson 3.4 Activity 2, 3		

Chapter 4: Why does the train float, even though gravity is acting on it?

- I can explain that more than one force can act on an object at the same time.
- I can investigate and show how forces can balance to keep an object from moving.
- I can use diagrams and evidence to explain why the train floats.

Day Eighteen Lesson 4.1 Activity 1, 3	Day Nineteen Lesson 4.2 Activity 1	Day Twenty Lesson 4.2 Activity 2	Day Twenty-One Lesson 4.2 Activity 3
Day Twenty-Two Lesson 4.4 Activity 1	Day Twenty-Three Lesson 4.4 Activity 2, 3		

Chapter 5: Why does the train change from floating to falling?

- I can explain that unbalanced forces make an object start moving or change its motion.
- I can investigate and use models to show how forces become unbalanced.
- I can use diagrams and evidence to explain why the train changes from floating to falling.

Day Twenty-Four Lesson 5.1 Activity 1, 2	Day Twenty-Five Lesson 5.2 Activity 1, 2	Day Twenty-Six Lesson 5.4 Activity 2	Day Twenty-Seven Lesson 5.5 Activity 1
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Inheritance & Traits

Inheritance & Traits - “Short on Time” (27 Days, 30 Minutes): Click [here](#) for instructional minutes and lesson adjustments.

Chapter One: Why are wolves different even though they are all the same species?

@Learning Target(s):

- I can observe and describe how living things can look the same in some ways but different in other ways.
- I can explain that animals of the same species share many traits but also have differences.
- I can ask science questions and help create a class explanation about why Wolf 44 looks different from the other wolves in its pack.

Day 1 Lesson 1.1 Activity 1, 4 Lesson 1.2 Activity 1	Day 2 Lesson 1.2 Activity 2	Day 3 Lesson 1.3 Activity 2, 3	Day 4 Lesson 1.4 Activity 1, 1	Day 5 Lesson 1.4 Activity 3 Lesson 1.5 Activity 1
Day 6 Lesson 1.5 Activity 3	Day 7 Lesson 1.6 Activity 1, 2	Day 8 Lesson 1.7 Activity 1, 2	Day 9 Lesson 1.7 Activity 3	

Chapter Two: Why is Wolf 44's color similar to one pack but different from the other?

@Learning Target(s):

- I can observe parents and offspring to find patterns in their traits and explain that traits come from genes passed down by parents.
- I can ask good science questions and use data to help me figure out why siblings can look alike in some ways but different in others.
- I can use what I learned about inherited traits to explain why Wolf 44's fur color is similar to one wolf pack but different from the other pack.

Day 10 Lesson 2.1 Activity 1	Day 11 Lesson 2.1 Activity 2 Lesson 2.2 Activity 1	Day 12 Lesson 2.2 Activity 2	Day 13 Lesson 2.2 Activity 3	Day 14 Lesson 2.3 Activity 2, 3
Day 15 Lesson 2.4 Activity 1, 2	Day 16 Lesson 2.5 Activity 1, 2	Day 17 Lesson 2.5 Activity 3, 4	Day 18 Lesson 2.6 Activity 3	

Chapter Three: Why isn't Wolf 44 like the Bison Valley Pack in hunting style and size?

 Learning Target(s):

- I can explain that some traits come from parents and some come from the environment.
- I can use evidence from investigations, readings, and models to explain where an organism's traits come from.
- I can describe how living in groups can help animals survive and how this relates to the traits they develop.

Day 19 Lesson 3.1 Activity 1, 2	Day 20 Lesson 3.2 Activity 2	Day 21 Lesson 3.2 Activity 3 Lesson 3.3 Activity 2	Day 22 Lesson 3.4 Activity 2	Day 23 Lesson 3.4 Activity 3
Day 24 Lesson 3.5 Activity 1	Day 25 Lesson 3.5 Activity 2	Day 26 Lesson 3.6 Activity 1, 2	Day 27 Lesson 3.6 Activity 3	

Environment & Survival

Environments & Survival - “Short on Time” (27 Days, 30 Minutes): Click [here](#) for instructional minutes and lesson adjustments.

Chapter 1: Why are the snails with yellow shells not surviving well?

@Learning Target(s):

- I can explain that organisms survive better when they can easily meet their needs for food, water, air, and safety.
- I can use models and observations to investigate how environments affect an organism's chance of survival.
- I can write and explain why some organisms, like the yellow-shelled snails, may not survive well in their environment.

Day 1 Lesson 1.1 Activity 1, 2 Lesson 1.2 Activity 1	Day 2 Lesson 1.2 Activity 2	Day 3 Lesson 1.2 Activity 3 Lesson 1.3 Activity 1	Day 4 Lesson 1.3 Activity 2
Day 5 Lesson 1.3 Activity 3, 4	Day 6 Lesson 1.4 Activity 1, 2, 3	Day 7 Lesson 1.4 Activity 4 Lesson 1.5 Activity I	Day 8 Lesson 1.5 Activity 2 Lesson 2.1 Activity 1, 2

Chapter 2: Why are the snails with banded shells more likely to survive than the snails with yellow shells?

@Learning Target(s):

- I can explain that some traits help organisms survive better in their environment (adaptive traits).
- I can use models and data to show how different traits affect an organism's chance of survival.
- I can write and explain why snails with banded shells are more likely to survive than snails with yellow shells.

Day 9 Lesson 2.1 Activity 3	Day 10 Lesson 2.1 Activity 4 Lesson 2.2 Activity 1	Day 11 Lesson 2.2 Activity 2	Day 12 Lesson 2.3 Activity 1
Day 13 Lesson 2.3 Activity 2, 3	Day 14 Lesson 2.4 Activity 1, 2	Day 15 Lesson 2.4 Activity 3	Day 16 Lesson 2.5 Activity 1
Day 17	Day 18	Day 19	

Lesson 2.5 Activity 2, 3	Lesson 2.6 Activity 1	Lesson 2.6 Activity 2, 3	
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Chapter 3: Why were snails with yellow shells more likely to survive in their environment 10 years ago?

🎯Learning Target(s):

- I can explain that when an environment changes, a once helpful trait may no longer help an organism survive.
- I can use models and data to show how environmental changes affect which traits are adaptive.
- I can write and explain why yellow-shelled snails were more likely to survive in the past.

Day 20 Lesson 3.1 Activity 1, 2	Day 21 Lesson 3.1 Activity 3 Lesson 3.2 Activity 1	Day 22 Lesson 3.2 Activity 2	Day 23 Lesson 3.2 Activity 3
Day 24 Lesson 3.3 Activity 1	Day 25 Lesson 3.3 Activity 2, 3	Day 26 Lesson 3.4 Activity 1, 2	Day 27 Lesson 3.4 Activity 3

Weather & Climate

Weather & Climate - "Short on Time" (27 Days, 30 Minutes): Click [here](#) for instructional minutes and lesson adjustments.

Chapter 1: Which island's weather would be best for orangutans? Chapter 2: Which island's weather will continue to be best for orangutans?

🎯 Learning Target(s):

- I can explain how meteorologists measure temperature and precipitation using consistent tools.
- I can collect and record weather data in the same way scientists do.
- I can use weather data to help make a scientific argument about which place is best for orangutans.

Day One Lesson 1.1 Activity 1, T	Day Two Lesson 1.2 Activity 1,2	Day Three Lesson 1.3 Activity 2	Day Four Lesson 1.4 Activity 1, 2
Day Five Lesson 1.5 Activity 2, 3	Day Six Lesson 1.6 Activity 1	Day Seven Lesson 1.6 Activity 2, 3	

Chapter 2: Which island's weather will continue to be best for orangutans?

🎯 Learning Target(s):

- I can organize weather data using line plots to see patterns.
- I can use patterns in data to make predictions about the weather.
- I can update my scientific argument using new weather data and observations.

Day Eight Lesson 2.1 Activity 1,2	Day Nine Lesson 2.2 Activity 2, 3	Day Ten Lesson 2.3 Activity 1, 3
Day Eleven Lesson 2.4 Activity 1,2	Day Twelve Lesson 2.5 Activity 1,2	Day Thirteen Lesson 2.5 Activity 3

Chapter 3: Over many years, which island's weather will be best for orangutans?

🎯 Learning Target(s):

- I can use bar graphs to show changes in weather over time.
- I can explain how weather patterns repeat each year and describe a location's climate.

- I can use patterns in weather and climate data to make predictions and compare different locations.

Day Fourteen Lesson 3.1 Activity 1,3	Day Fifteen Lesson 3.2 Activity 1,2	Day Sixteen Lesson 3.3 Activity 1,3	Day Seventeen Lesson 3.4 Activity 1,2
Day Eighteen Lesson 3.4 Activity 3	Day Nineteen Lesson 3.5 Activity 1	Day Twenty Lesson 3.6 Activity 2,3	Day Twenty-One Lesson 3.7 Activity 1, 2
Day Twenty-Two Lesson 3.7 Activity 3			

Chapter 4: How can the WPO prepare for natural hazards that might damage their offices?

@Learning Target(s):

- I can identify patterns in weather events and natural hazards that happen around the world.
- I can use patterns in weather and climate data to predict natural hazards.
- I can design and suggest ways to make buildings safer based on weather and natural hazard patterns.

Day Twenty-Three Lesson 4.1 Activity 1 Lesson 4.2 Activity 1	Day Twenty-Four Lesson 4.2 Activity 2	Day Twenty-Five Lesson 4.3 Activity 1, 2
Day Twenty-Six Lesson 4.3 Activity 3	Day Twenty-Seven Lesson 4.4 Activity 1,2	