

Grade: 2

Subject: Science

Unit
Buoyancy

Essential Question #1	Why does something float?
Essential Question #2	What can you change to make something float?
Essential Question #3	
Essential Question #4	
Essential Question #5	

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Subject: Science

Unit: Buoyancy

Essential Question # 1
Why does something float?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will manipulate clay to get it to float.	K, Comp, App
Objective/Skill #2	The student will list reasons why clay floated.	K, Comp., An
Objective/Skill #3		
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **Students will make clay float.**
- **Discuss and list why clay floated.**
- **Write a journal entry discussing why something floats.**

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Subject: Science

Unit: Buoyancy

Essential Question # 2

What can you change to make something float?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will change the shape of their clay to hold greater cargo.	K, Comp, App
Objective/Skill #2		
Objective/Skill #3		
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **The student will change the shape of the ball of clay.**
- **Discuss as a class what they did**
- **Write a journal entry telling how they changed the clay.**

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Subject: Science

Unit
Three Pigs:
Constructing a House

Essential Question #1	What criteria does your house construction have to follow?
Essential Question #2	How will your group make decisions?
Essential Question #3	What will you do if your plans don't work?
Essential Question #4	How do you use a scale or a pan balance?
Essential Question #5	

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Subject: Science

**Unit: Three Pigs:
Constructing a House**

Essential Question # 1

What criteria does your house construction have to follow?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will read, discuss and understand criteria.	K, Comp
Objective/Skill #2	The student will design a plan for their house.	K, Comp, App, S
Objective/Skill #3	The student will construct their house following their plans	K, Comp, Ap
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- Draw a plan for their house.**
- Construct their house**
- Use ESTEC kit**

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**Unit: Three Pigs:
Constructing a House**

Essential Question # 2

How will your group make decisions?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will discuss and create guidelines for cooperative groups.	K, Comp
Objective/Skill #2	The student will perform in cooperative groups following established guidelines.	App
Objective/Skill #3		
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **Role playing**
- **Make a list of guidelines**
- **Use ESTEC kit**

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**Unit: Three Pigs:
Constructing a House**

Essential Question # 3

What will you do if your plans don't work?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will determine if their plans are working	An
Objective/Skill #2	The student will change their plans if they are not being successful.	App, E
Objective/Skill #3	The student will discuss why plans aren't working and what to do differently	K, Comp, An, App
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **Constructing house**
- **Group discussion**
- **ESTEC kit**

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**Unit: Three Pigs:
Constructing a House**

Essential Question # 4

How do you use a scale or a pan balance?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will use a scale or a pan balance to weigh their house.	K, Comp, App
Objective/Skill #2	The student will balance the two sides of a pan balance.	K, Comp, App
Objective/Skill #3	The student will read the numbers on a scale.	K, Comp, App, An
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- The student will weigh their house**
- The student will weigh various objects**
- The student will practice reading the numbers on a scale**
- ESTEC kit**

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Subject: Science

Unit
Simple Machines

Essential Question #1	What is a machine?
Essential Question #2	What are some simple machines and what jobs do they do?
Essential Question #3	
Essential Question #4	
Essential Question #5	

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Subject: Science

Unit: Simple Machines

Essential Question # 1

What is a simple machine?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will complete jobs with and without simple machines	K, Comp
Objective/Skill #2	The student will discuss which jobs were easier.	K, Comp, App
Objective/Skill #3	The student will recite the definition of a simple machine.	K, Comp
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- Students will attempt to sew-first using just thread and then using thread and a needle.**
- Students will attempt to sharpen a pencil-first with their hands and then with a sharpener.**

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Subject: Science

Unit: Simple Machines

Essential Question # 2

What are some simple machines and what jobs do they do?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will identify what the inclined plane does?	K, Comp
Objective/Skill #2	The student will identify what the wedge does.	K, Comp
Objective/Skill #3	The student will identify what the pulley does.	K, Comp
Objective/Skill #4	The student will identify what the lever does.	K, Comp
Objective/Skill #5	The student will identify the wheel and axle does.	K, Comp

Activities that you may opt to use with objectives/skills being taught above

- **Read the Inclined Planes by Michael Dahl**
- **Read Pulleys by Michael Dahl**

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Unit
Plant and Animal Life Cycles

Essential Question #1	What is a life cycle?
Essential Question #2	What does a plant need to survive?
Essential Question #3	What does an animal need to survive?
Essential Question #4	What are the parts of a plant?
Essential Question #5	

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Subject: Science

**Unit:
Plant and Animal Life Cycles**

Essential Question # 1
What is a life cycle?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will list events that follow a cycle.	K, C,
Objective/Skill #2	The student will define a cycle.	K, C, Ap, An,
Objective/Skill #3	The student will state the life cycle of a plant.	K, Comp,
Objective/Skill #4	The student will state the life cycle of an animal.	K, Comp
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **The student will list events that come in cycles - days of the week, months.**
- **The student will use the ESTEC Kit - Life Cycles**
- **The student will draw a diagram to show the life cycle of a plant or animal.**

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Subject: Science

**Unit:
Plant and Animal Life Cycles**

Essential Question # 2

What are the parts of a plant?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will plant a seed.	K,
Objective/Skill #2	The student will observe seed cups and record observations in a plant journal.	K, C, An,
Objective/Skill #3	The student will make a diagram and label parts of the plant as they form.	K, Comp, Ap, An, S,
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **The student will plant seeds in clear cups.**
- **The student will observe seed cups.**
- **The student will draw a diagram and label observations.**

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Subject: Science

**Unit:
Plant and Animal Life Cycles**

Essential Question # 3

What does a plant need to survive?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will observe plants growing under different conditions.	K,
Objective/Skill #2	The student will write observations in their plant journal.	K, C, Ap,
Objective/Skill #3	The student will compose a list of what plants need to survive.	E, An, S,
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **The student will make a seed bag.**
- **The student will plant seeds and manipulate the variables the seeds are grown under.**
- **The student will use the ESTEC Kit.**
- **The student will complete a plant journal.**

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Subject: Science

**Unit:
Plant and Animal Life Cycles**

Essential Question # 4

What does an animal need to survive?

**K - knowledge,
S - Synthesis,**

**Comp - Comprehension,
E - Evaluation**

App - Application,

An - Analysis,

**CT
LEVEL**

Objective/Skill #1	The student will observe animals in their habitat.	K,
Objective/Skill #2	The student will write their observations in their animal journal.	K, C, An, Ap,
Objective/Skill #3	The student will compose a list of what animals need to survive.	E, An, S,
Objective/Skill #4		
Objective/Skill #5		

Activities that you may opt to use with objectives/skills being taught above

- **The student will use the ESTEC Kit.**
- **The student will complete an animal journal.**