

SCIENCE FINAL EXAM

Grade 3

Dear Parents

Please revise these worksheets with your children for the final exam on **day 3 /6/ 2018** in addition the required pages in the books as follows:

Physical science

Unit (9)

Lesson 1

What are some physical properties ?

lesson 2

What are the states of matter ?

lesson 4

What are some changes to matter ?



Note : The answer key and the revision sheets on the school website

What Are Some Physical Properties?

Science Words

Say each word quietly to yourself. Then read the meaning.

Read the tip to help you remember.

matter anything that takes up space

physical property a characteristic of matter that you can observe or measure directly

mass the amount of matter an object has

volume the amount of space an object takes up

temperature the measure of how warm something is

Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. A physical property is a part of matter you can observe or measure.
2. Mass is the amount of matter an object has.
3. Objects with more mass are harder to move than objects with less mass.
4. You can use a pan balance to measure mass in grams.
5. Volume is the amount of space an object takes up.
6. To find the volume of a cube, multiply its length by its width and its height.
7. Use a graduated cylinder to measure the volume of a liquid.
8. Use a thermometer to measure temperature, or how warm something is.
9. On a Fahrenheit scale, water freezes at 32 degrees and boils at 212 degrees.
10. On a Celsius scale, water freezes at 0 degrees and boils at 100 degrees.

Measurement	Tool	Unit
Mass	pan balance / scale	gram
Volume	graduated cylinder	milliliter
Length	meter stick / Ruler	Meter / cm
temperature	thermometer	Fahrenheit / Celsius

(A) Choose the correct answer:

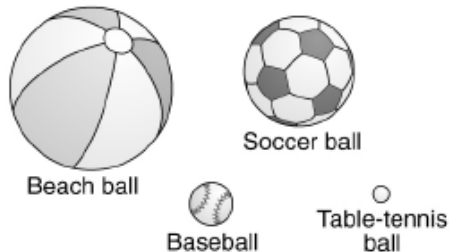
1- Books have physical properties. Which of these are two physical properties of a school textbook?

- A. fuzzy and soft
- B. soft and sticky
- C. hard and rectangular

2- Look at these objects.

Which of the physical properties is the same for all the objects?

- A. hardness
- B. shape
- C. size



3-) Mariam wants to measure the mass of a rock. Which of these tools should she use?

- A. a ruler
- B. a pan balance
- C. a graduated cylinder

(B) Table has physical properties. Write two physical properties of a Table?

(C) Complete the table

Measurement	Tool	Unit	
Mass			
Volume			
Length			

(D) Fill in blanks

Temperature	-	Matter	-	volume	-	mass
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Anything that takes up space. -----

The amount of matter an object has. -----

The amount of space an object takes up. -----

The measure of how warm something is. -----

What Are the States of Matter?

Science Words

Say each word quietly to yourself. Then read the meaning.

Read the tip to help you remember.

solid matter that takes up a definite amount of space and has a definite shape

liquid matter that takes up a definite amount of space, but does not have a definite shape

gas matter that does not take up a definite amount of space, and does not have a definite shape

evaporation what happens when a liquid changes to a gas

condensation when happens when a gas changes to a liquid

Read the Ideas more than once. Do your best to remember them.

1. Solids take up a definite amount of space and have a definite shape.
2. Liquids take up a definite amount of space, but don't have a definite shape.
3. Gases don't take up a definite amount of space or have a definite shape.
4. When matter cools, it loses energy.
5. Water becomes a solid at 32° Fahrenheit, which is the same as 0° Celsius.
6. When matter is heated, it gains energy.
7. Water boils and becomes a gas at 100° Celsius, which 212° Fahrenheit.
8. Evaporation is when liquid water changes to a gas without boiling.
9. When water vapor cools, it may condense.
10. Condensation is when a gas changes into a liquid.

(A) Choose the correct answer:

1- What is happening to this snowman



- A. It is freezing.
- B. It is melting.
- C. It is condensing.

2- Water can change state. What happens to water during condensation?

- A. It changes from a liquid to a gas.
- B. It changes from a gas to a liquid.
- C. It changes from a liquid to a solid.

3- Water can change state. What happens to water during evaporation?

- A. It changes from a liquid to a gas.
- B. It changes from a gas to a liquid.
- C. It changes from a liquid to a solid.

(B) SHORT ANSWERS:

Sara drew the picture of an ice cube on a table.
What will happen to the ice cube over time?



What can happen to water at 0 °C?

What happens to water during condensation?

What happens to water during evaporation?

Write the three state of water .

a solid

a liquid

a gas

What Are Some Changes to Matter?

physical change a change in matter in which the kind of matter stays the same

Matter has physical properties, such as color, size, shape, and mass. A *physical change* is a change in a physical property.

Soaking, shredding, and crumpling paper are *physical changes* because they change the physical properties of the paper. They do not change the paper into something new.

mixture two or more substances that are combined without changing any of them

Mixture contains the word *mix*. To mix things is to combine them.

To make a *mixture*, you mix things together.

solution a mixture in which all the substances are easily mixed

Solution, *specific*, and *same* begin with the same sound.

A *solution* is a specific kind of mixture—it is the same throughout.

dissolve completely mix one substance in another

Dissolve and *disappear* begin in the same way. When one thing *dissolves* in seems to disappear because it can't be seen—but it doesn't disappear.

chemical change a change in matter that results in a new kind of matter

Chemical and *create* begin with the same sound. A *chemical change* creates a new kind of matter. A cooked apple does not have the same properties as a raw apple, so it is a new kind of matter.



A fruit salad is a mixture.



The ocean is a solution of salt and

Read the Ideas more than once. Do your best to remember them.

1. Folding, tearing, bending, and cutting are examples of physical change.
2. Mixtures and solutions are physical changes.
3. Lemonade, tea, and salt water are examples of solutions.
4. You can use physical properties like size to separate things in a mixture.
5. Most chemical changes cannot be undone.
6. Rust and burning are examples of chemical changes.
7. Chemical changes cause leaves to turn color and break down after they fall.
8. Chemical changes break down food into substances your body can use.
9. Chemical changes cause a scab to form on your skin when you scrape it.
10. Heat causes chemical changes to take place when food is baked.

(A) Choose the correct answer:

1- What is lemonade an example of?

- A. a solid
- B. a solution

2- Rusting is an example of a

- A. chemical change.
- B. physical change.

3- Which of these is a physical change?

- A. A rock is broken down into smaller pieces.
- B. A piece of wood catches fire and burns.

4- A mixture forms when

- A. matter is cut.
- B. two or more kinds of matter combine.

(B) SHORT ANSWERS:

Would fruit rotting be a physical or chemical change?

As part of your smoothie, you put some frozen vanilla yogurt into the blender. It melts as it is mixed. What type of change does this represent: physical or chemical?

(c) Sort these changes to a physical or chemical changes :

Breaking	Cutting	Burning	Melting	Rusting	Cooking
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physical change	chemical change

Answer Key

(A) Choose the correct answer:

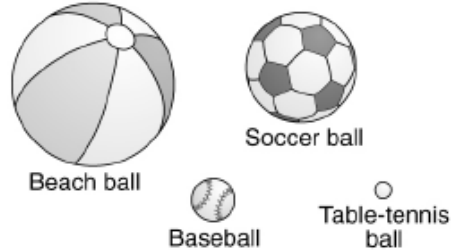
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- B. soft and sticky
- C. hard and rectangular**

2- Look at these objects.

Which of the physical properties is the same for all the objects?

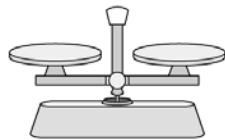
- A. hardness
- B. shape**
- C. size



3- There are fish in the class aquarium. Ali wants to feed them 1 gram of fish food. Which tool would he used to measure the fish food?



Centimeter ruler



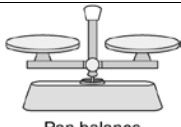


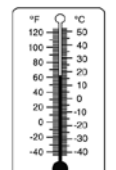
Pan balance

- A.
- B.**
- C.

(B) Table has physical properties. Write two physical properties of a Table?

----- **hard and rectangular** -----

(C) Complete the table

Measurement	Tool	Unit	
Mass	pan balance / scale	gram	 Pan balance
Volume	graduated cylinder	milliliter	
Length	meter stick / Ruler	Meter / cm	 Centimeter ruler
Temperature	thermometer	Fahrenheit / Celsius	 Thermometer

(D) Fill in blanks

Temperature - Matter - volume - mass

Anything that takes up space. ----- **Matter** -----

The amount of matter an object has. ----- **mass** -----

The amount of space an object takes up. ----- **volume** -----

The measure of how warm something is. ----- **Temperature** -----

(A) Choose the correct answer:

1- What is happening to this snowman



- A. It is freezing.
- B. It is melting.**
- C. It is condensing.

2- Water can change state. What happens to water during condensation?

- A. It changes from a liquid to a gas.
- B. It changes from a gas to a liquid.**
- C. It changes from a liquid to a solid.

3- Water can change state. What happens to water during evaporation?

- A. It changes from a liquid to a gas.**
- B. It changes from a gas to a liquid.
- C. It changes from a liquid to a solid.

(B) SHORT ANSWERS:

1- Sara drew the picture of an ice cube on a table.
What will happen to the ice cube over time?



----- **It changes from a solid to a liquid (Melting)** -----

2- What can happen to water at 0 °C?

----- **It changes from a liquid to a solid (freezing)** -----

3- What happens to water during condensation?

----- **It changes from a gas to a liquid** -----

4- What happens to water during evaporation?

----- **It changes from a liquid to a gas** -----

Write the three state of water .

a solid

a liquid

a gas

---Ice-----

----Water-----

----water vapor-----

(A) Choose the correct answer:

1- What is lemonade an example of?

- A. a mixture
- B. a solution**

2- Rusting is an example of a



Rusting

- A. chemical change.**
- B. physical change.

3- Which of these is a physical change?

- A. A rock is broken down into smaller pieces.**
- B. A piece of wood catches fire and burns.

4- A mixture forms when

- A. matter is cut.
- B. two or more kinds of matter combine.**



rotting

(B) SHORT ANSWERS:

Would fruit rotting be a physical or chemical change?

Fruit rotting is a chemical change because you cannot change the fruit back to its original state. The fruit has changed its properties.

you put some frozen vanilla yogurt into the blender. It melts as it is mixed. What type of change does this represent: physical or chemical?

This is a physical change. Melting and freezing are physical changes.

(c) Sort these changes to a physical or chemical changes :

Breaking	Cutting	Burning	Melting	Rusting	Cooking
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physical change	chemical change
Breaking Cutting	Burning Rusting

Melting

Cooking