

STRAND	Energy
SUB-STRAND	Forces
CONTENT LEARNING OUTCOME	Investigate and identify how different mediums such as oil/water/air affect the weight and mass of objects.

LESSON NOTES

FORCES

- A force can be a **push, pull or twist applied to an object.**
- You cannot see a force but often you can see what it does. Forces can change the speed of something, the direction it is moving in or its shape.
- A **force meter** is used to measure forces. Force meters contain a **spring** connected to a metal hook. The spring stretches when a force is applied to the hook. The bigger the force applied, the longer the spring stretches and the bigger the reading. The unit of force is called the **newton**. It has the symbol N.

Mass vs Weight

Mass is a measurement of the amount of matter something contains	Weight is the measurement of the pull of gravity on an object.
Mass is measured by using a balance comparing a known amount of matter to an unknown amount of matter.	Weight is measured on a scale. Weight is a force, so it's measured in newtons
The Mass of an object doesn't change when an object's location changes.	Weight does change with location.

Gravity- All objects have a force that attracts them towards each other. This is called **gravity**. Even you attract other objects to you because of gravity, but you have too little mass for the force to be very strong. Gravitational force increases when:

- the masses are bigger
- the objects are closer

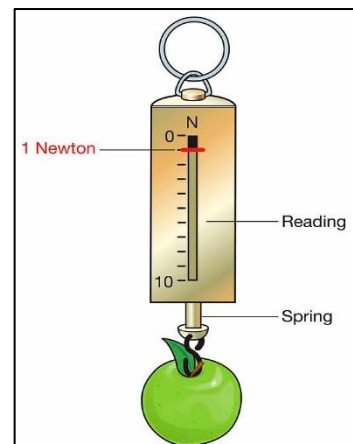
Gravity only becomes noticeable when there is a really massive object like a moon, planet or star. We are pulled down towards the ground because of gravity. The gravitational force pulls in the direction towards the centre of the Earth.

- Mass is measured in **kilograms, kg, or grams, g.**

ACTIVITY

Complete these sentences using a word from the list.

1. **Weight** is the measure of the pull of gravity on an object.
2. The weight of an object changes when the pull of **gravity** changes.
3. The amount of matter in an object is called **mass**.
4. All objects have a **force** that attracts them to each other.
5. The unit of force is called **newton**.
6. A force meter has a **spring** that stretches when force is applied.



WORD LIST

newton	weight	spring	gravity	force	mass
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1077 RAVIRAVI SANGAM SCHOOL
Weekly Home Study Package Set 6

YEAR/LEVEL: 8

SUBJECT: Healthy Living

STRAND	STRAND 3 SAFETY
SUB-STRAND	Community safety
CONTENT LEARNING OUTCOME	Evaluate the consequences of disasters in the community.

LESSON NOTES

Recovering from Disasters or Accidents.

- Recovering from a traumatic event such as an accident or disaster can be difficult.
- We should assist those who need help badly and stay calm.

Here are Some Tips

- 1. Seek comfort and support.** Being proactive about your situation and well-being (rather than passively waiting for someone else to help you)
- 2. Re-establish routine.** Do things that keep your mind occupied (read, watch a movie, and play with your friends), so you're not dedicating all your energy and attention to the traumatic event.
- 3. Connect with others-** You may be tempted to withdraw from social activities and avoid others after experiencing a traumatic event. Support from other people is vital to recovery from traumatic stress, so lean on your close friends and family members during this tough time.
- 4. Challenge your sense of helplessness-** Trauma leaves you feeling powerless. One of the best ways to reclaim your sense of power is by helping others (comfort someone else, volunteer your time, give blood etc)
- 5. Acknowledge and accept your feelings.** Sadness, grief, anger and fear are normal reactions to the loss of safety and that comes in the wake of a disaster. Accepting these feelings as part of the grieving process, and allowing yourself to feel what you feel, is necessary for healing.
- 6. Dealing with traumatic grief and other painful emotions-** Don't try to force the healing process. Be patient with the pace of recovery. Talk to someone you trust about what you're feeling. Give yourself time to heal and to mourn the losses you've experienced.
- 7. Make Stress reduction a priority.**

ACTIVITIES

1. Study the picture and explain what actions you will take to help those involved. **Many acceptable answers.**

Scenario	Tips
No other vehicle in sight	Tell them to stay calm. Don't panic.
Injury	Apply first aid./Counsel
Traumatised victim	Calm him/her down.
Anger (on driver)	Speak to him/her. Calm down
Fear for the injured.	Call for help
Stressed Driver	Talk to him/her.



2. How can you recover from disasters and accidents if faced with these challenges?

Stay positive. Get help. Many acceptable answers as listed above.

Sangam Education Board: Online Resources

YEAR/LEVEL: 8

SUBJECT: Social Science

STRAND	PLACE AND ENVIRONMENT
SUB-STRAND	People and Care of Places
CONTENT LEARNING OUTCOME	Gather information on major Global Climatic issues affecting our world today and express advocating strategies to alleviate their impacts on our lives.

LESSON NOTES

Major World Climatic Issues.(2)

Pollution

- Pollution is also a major problem today.
- **Pollution** is the introduction of contaminants into the natural environment that cause adverse changes.
- **Pollutants** are substances that pollute the environment.
- Man have pumped many dangerous chemicals and pollutants into the atmosphere, polluting the very air we breathe. A major source of air pollution is caused by vehicles and industrial wastes.
- Water is polluted by human activities such as rubbish and litter dumped in rivers, chemical toxins and pesticide seeping into water supply, breakdown of human and animal waste contaminating water that we drink.
- Land pollution is caused by the products in our society that we do not need – that is the rubbish. The more rubbish we produce the more harm it does to the quality of our land.
- Noise pollution is common in today’s technological society .Airplanes and other transport vehicles, machinery at work and at home all contribute to this problem.



ACTIVITIES

1. Identify and list down the different types of pollution. **Air/Water/ Land/Noise/ Radioactive**
2. Pick one type of pollution and briefly explain how it affects the environment.
Eg Water Pollution

a. Destroys habitat of organisms./plant and animal species get poisoned and die./ bad smell .

Many acceptable answers.

3. State three ways in which you can reduce pollution in your area.

a. Dispose waste properly.

b. Recycle/Reuse waste.

c. Educate people.

Many acceptable answers.

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Weekly Home Study Package

YEAR/LEVEL: 8

SUBJECTS: MATHEMATICS

SET 6

STRAND	3 MEASUREMENT
SUB-STRAND	Weight
CONTENT LEARNING OUTCOME	Select and estimate weight/ mass to compare and explain different measures of objects and solve problems.

LESSON NOTES

WEIGHT is measured in grams [g] or kilograms [kg].

$$1\text{kg} = 1000\text{g OR } 1000\text{g} = 1\text{kg}$$

Examples: 7kg changed into grams= $7 \times 1000\text{g} = 7000\text{g}$

$$500 \text{ grams changed into kg} = \frac{500}{1000} = 0.5\text{kg} = \frac{1}{2} \text{ kg}$$

ACTIVITY

1.Convert each of the following to the unit given in brackets.

a. $750\text{g} = 0.75 \text{ kg}$

b. $2780\text{g} = 2.780 \text{ kg}$

2.Calculate the following weights.

a. $\frac{1}{4}$ of 8kg.

2kg or 2000g

b. $\frac{2}{3}$ of 9kg.

6kg or 6000g

c. $\frac{5}{10}$ of 3kg

1.5kg or 1500g

3.10 oranges weigh 5kg. 7 apples weigh 1.75kg. What would be the total weight of 4 oranges and 3 apples?

10 oranges weigh = 5kg so 1 orange weighs = 0.5 kg . Thus $0.5 \times 4 = 2\text{kg}$

7 apples weigh = 1.75kg so 1 apple weighs= 0.25kg . Thus $0.25 \times 3 = 0.75\text{kg}$

Total $2\text{kg} + 0.75\text{kg} = 2.75\text{kg}$ or 2750g

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Weekly Home Study Package
RECAP

YEAR/LEVEL: 8

SUBJECTS: ENGLISH

SET 6

Part A: Past Tense

1. Mrs Yee (**held**) little Linda's hand as they crossed the road. (hold)
2. Yesterday class 6 (**wrote**) an essay about their picnic. (write)
3. Vishnu (**took**) off his shoes. (take)
4. When the plane (**flew**) over his village, Galu shouted. (fly)
5. After the soccer game last week, the boys (**drank**) a large bottle of coke each. (drink)
6. Viliame watched his fishing line as it (**sank**) down to the bottom of the sea. (sink)
7. "Deborah . (**swam**) in last week's Swim-a-thon, didn't she?" asked Viti. (swim)
8. " I (**tried**) to win the race but I couldn't," said Amrat. (try)

Part B: Pairs: Choose the correct word.

1. When Ben _____ his mother, he called out. (sow, saw)
2. Yash _____ a scream and she became frightened. (had, heard)
3. Abhiman _____ off his shirt and dived into the river. (took/ put)
4. Ricknesh threw his spear at the shark and it _____ away. (swam, ran)
5. James was sad when his uncle _____. (dead, died)
6. Mrs Lal told her _____ to have his dinner. (husband, wife)
7. The _____ was wearing a beautiful sari and everyone said she looked lovely. (bride, groom)
8. Everyone was laughing _____ Bob. (accept, except)

Part C: Punctuations

Punctuate and correct the following sentences.

1. **Thomas** looked everywhere for his brother's shirt.
2. Tourists say that western Samoan's climate is hot.
3. An elephant's trunk is very strong.
4. Tom's car and his friend's truck collided; the truck's tyres burst.