

Litera Valley Zee School, Hosur
Grade 9- Worksheet Practice-September(2019-20) – Week 3

Science

(Date of Submission:20-09-19)

Physics

Topic: Work and energy

1. If energy is neither created nor destroyed then from where do we get energy?
2. State and explain one example where kinetic energy is present in a body and is used.
3. Define power and give its unit.
4. What is potential energy? Explain different types of potential energy.
5. How is work and energy related to each other?
6. Give one example where work done on an object is negative.
7. A man does 60 J of work in 6 seconds. Calculate the power.
8. Give one example where work done on an object is zero.
9. What change should be affected in the velocity of the body to maintain the same kinetic energy if its mass is increased two times?
10. Difference between energy and power?

Chemistry

Topic: Atoms and Molecules

1. Why is not possible to see an atom with naked eye?
2. If the valency of carbon is 4 and that of sulphur is 2, write the formula of the compound formed between carbon and sulphur atoms. Also name the compound.
3. Give the formulae of the compounds that will be formed from the following set of compounds
i. Calcium and fluorine ii. Magnesium and oxygen iii. Sodium and sulphur iv. Carbon and chlorine v. Carbon and sulphur vi. Nitrogen and hydrogen

Math

(Date of Submission:23-09-19)

Topic: Triangles

1. State True/False: In triangles ABC and DEF, $\angle A = \angle D$, $\angle B = \angle E$ and $AB = EF$. The two triangles are congruent.
1. TRUE
2. FALSE
2. State True/False: Angles opposite to equal sides of an isosceles triangle are equal.
1. TRUE
2. FALSE
3. State True/False: Two triangles are congruent if two angles and the included side of one triangle are equal to two angles and the included side of other triangle.
1. TRUE
2. FALSE
4. In $\triangle ABC$, $\angle B = 90^\circ$. Which side is hypotenuse?
1. AB
2. BC

3. AC
4. None of these
5. Choose the correct option: In triangles ABC and DEF, $AB = AC$, $\angle C = \angle D$ and $\angle B = \angle E$. The two triangles are _____.
 1. isosceles and congruent
 2. isosceles but not congruent
 3. not isosceles but congruent
 4. Neither isosceles nor congruent
6. Fill in: In triangles ABC and XYZ, $BC = YZ$ and $\angle B = \angle Y$. The two triangles will be congruent by ASA axiom if _____.
 1. 30 Degrees
 2. 45 Degrees
 3. 90 Degree
 4. 60 Degree
8. Choose the correct option: If $AB = QR$, $BC = PR$ and $CA = PQ$, then _____.
 1. $\Delta ABC \cong \Delta PQR$
 2. $\Delta CBA \cong \Delta PRQ$
 3. $\Delta BAC \cong \Delta RPQ$
 4. $\Delta PQR \cong \Delta BCA$
9. Fill in the blanks: Hypotenuse of a right isosceles triangle is $5\sqrt{2}$ cm. The value of its side is _____.
 1. 10 cm
 2. 6 cm
 3. 5 cm
 4. 2.5 cm
10. In ΔPQR , $\angle P = 90^\circ$ and $\angle R = 30^\circ$. Which side is longest?
 1. PR
 2. PQ
 3. QR
 4. All are equal