ALAGU JOTHI ACADEMY

(An International Standard CBSE Sr. Sec. School)

PRACTICE WORKSHEET – 2017-2018

8

Science

Name	_____	**Class**	
Date	_____	**Section**	

Friction

Very Short Q&A:

Q1: Define friction

Q2: Why vehicles slow down when brakes are applied?

Q3: Friction opposes the _____ between the surfaces in contact with each other.

Q4: Friction produces

a. Light b. alpha rays c.Heat d.All of the above

Q5: The force of friction always opposes the _____ force.

Q6: Is friction is same for all the surfaces?

Q7: Force of friction is greater in case of rough surface or smooth surface?

Q8: Define static friction.

Q9: Define sliding friction.

Q10: Give examples to support the statement that- "friction is important for most of our day to day activities".

Q11: Give an example to show friction produces heat.

Q12: Why trucks tyres are treaded?

Q13: Why sole of shoes are grooved?

Q14: _____ is used to increase friction in the brake system of automobiles.

Q15: Why kabbadi players should rub their hand with soil before they start playing?

Q16: Powder is sprinkled on the carom board to reduce _____.

Q17: Define lubricants.

Q18: Can we reduce friction to zero by using lubricants?

Q19: What is spring balance?

Q20: Rolling increases friction. True / False

Q21: Why sliding is replaced by rolling in most of the machines?

Q22: Give some examples showing replacement of sliding with rolling in machines.

Q23: Common name of gases and liquid is _____.

Q24: Define drag.

Q25: Water and other liquid exerts _____ when objects move through them.

Q26: Sliding friction is _____ than the static friction.

Q27: Arrange forces due to rolling, static and sliding frictions in a decreasing order.

1. rolling, sliding , static
2. sliding, static, rolling
3. static, sliding, rolling
4. None of these

Q28: Name the force responsible to fall down a boy when he steps on a banana peel.

Q29: Friction depends upon _____ of the surface.

Q30: Name the device used for measuring force acting on an object.

Short Q&A:

Q1: Why a vehicle slows down when brakes are applied?

Q2: Why it is difficult to move on wet floor?

Q3: Define force of friction with an example.

Q4: What are the factors affecting friction?

Q5: Give an example to show that friction increases if the two surfaces are pressed harder.

Q6: Why sliding friction is slightly smaller than static friction?
Q7: What would have happened if there were no friction between chalk and board?
Q8: When we strike a matchstick against the rough surface, it produces fire. Why so?
Q9: Give an example to support that friction leads to wastage of energy.
Q10: How can we increase friction of soles of shoes?
Q11: How can we increase friction of tyres of vehicles?
Q12: Give an example where we have to minimise friction.
Q13: What is the function of lubricants?
Q14: Why friction can never be entirely eliminated?
Q15: What is rolling friction?
Q16: Why it is convenient to pull luggage bags fitted with rollers?
Q17: What do you mean by sliding friction?
Q18: Differentiate between sliding and rolling friction.
Q19: Define fluid friction.
Q20: How frictions are reduced in machines?
Q21: How can we reduce fluid friction?
Q22: Explain why sportsmen use shoes with spikes.
Q23: A has to push a lighter box and B has to push same heavier box on the same floor, who will have to apply larger force and why?
Q24: Why objects moving in fluid must have special shapes.
Q25: Why it is difficult to walk on a floor wet with soapy water?
Q26: Why it is difficult to walk on an extra smooth floor?
Q27: Explain the function of spring balance.
Q28: What is lubricated friction?
Q29: What are the factors effecting friction?
Q30: "Friction is an evil too". Justify the statement.

Long Q&A:

Q1: Explain why friction is a necessary evil?
Q2: Force of friction increases when two surfaces are pressed harder? Justify the statement.
Q3: Explain increasing and reducing friction.