

DATE: 22 SEP 2020

SUBJECT : SCIENCE

CHAPTER-7:

TEMPERATURE AND HEAT

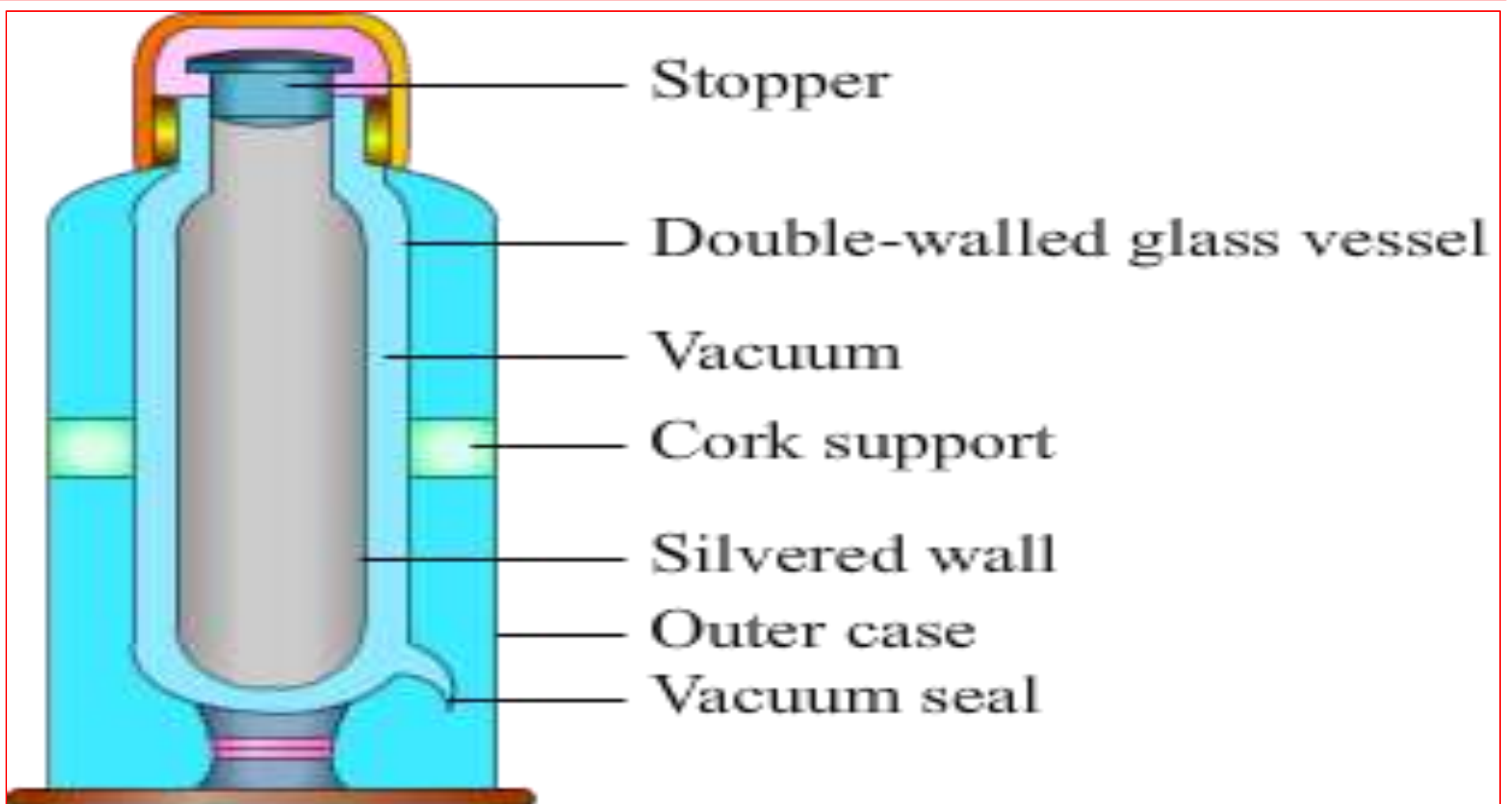
TOPIC-7:

THERMOS FLASK

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THERMOS FLASK: It is a bottle or container that can keep liquid hot or cold for long time.

construction & working of thermos flask: A thermos Flask is a bottle with a doubled-walled container inside of it. The air between the two walls is sucked out during construction creating a vacuum. The vacuum prevent heat flow by conduction and radiation. The outer case is made up of an insulating material such as plastic. The mouth is closed with insulator like cork or plastic. These features minimize loss of heat due to conduction. The flask contains a double-walled glass or metal bottle. The inner side of the outer wall and the outer side of the inner wall are silvered or polished. This helps to reflect the heat back into the flask, thus reducing loss of heat through radiation.



NOTE: 1. Instead of containing some kind of heating element to keep hot things hot, a **thermos** is designed to keep **hot** things hot by not allowing heat to escape.

2. A Thermos Flask is constructed or designed in such a way that all the provisions of transfer of heat by conduction, convection and radiation are stopped. It is done by creating vacuum gap between the two wall and silvering or polishing the walls.

QUESTIONS: HOME ASSIGNMENT

1. What is Thermos Flask?
2. Draw a label diagram of a thermos Flask.
3. Describe the construction and working of a thermos Flask.
4. Why there is double wall in a thermos Flask?
5. A vacuum is created between the two walls of a thermos Flask. Give reason.
6. Do you think that a thermos Flask can keep hot liquid hot for so many days? Give reason to support your answer