



3055 BA SANGAM COLLEGE

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WORKSHEET 12

School: Ba Sangam College

Name: _____

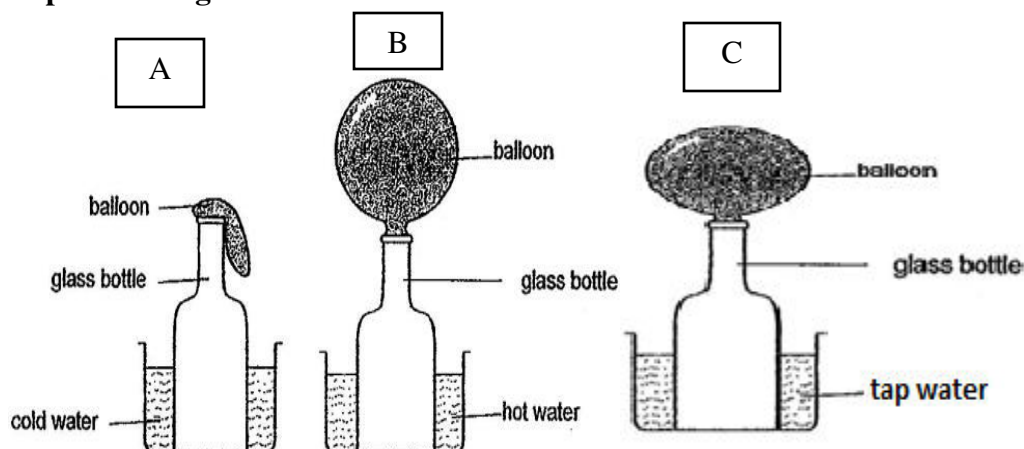
Subject: Basic Science

Year/Level: 9

Strand 2	Matter
Sub Strand 2.1	Investigating Matter
Content Learning Outcome	Describe the structure and properties of matter using particle model of atoms and molecules and account for the behavior of matter when heat is added or removed.

Lesson Notes–Investigating

I. Expansion in gases



Method

- Set up the experiment as shown above
- Leave the set for 15 minutes
- Note down all observations

Results

- ✓ Air particles gain heat and the balloon expands in flask B
- ✓ The air particles lose energy and the balloon contracts in flask A
- ✓ It will not be affected in flask C

Conclusion

Since flask B was placed in hot water the air inside the balloon gained energy and the balloon expanded

Flask A was placed in an ice bath the air particles inside the bottom came close together occupying less space

No change was observed for flask C.

Exercise

1. a. What happens to the balloon in set up A?

_____ (1 mark)

b. Explain your answer in part (a) above in terms of particle model of matter.

(2 marks)

2 a. What happens to the balloon in set up B?

_____ (1 mark)

b. Explain your answer to part (b) above in terms of particle model of matter.

(2 marks)

3. a. What happens to the balloon in set up C?

_____ (1 mark)

