

GROUP WITHIN A GROUP - MAKING SUB-GROUPS

15

By now you must have practised making groups several times and gone on field trips as well.

Make a list of the chapters in this book. (1)

What would you call this group? (2)

From this list, write down the names of the chapters which involve going on field trips. (3)

Can these chapters form a separate group? (4)

In Class 8 you will study a chapter titled 'Protection of Crops'. You will have to go on a field trip while doing this chapter.

Can this chapter be a part of the group of Class 6 chapters with field trips? (5)

Bicycle, truck, bullock cart, bus, boat, airplane, car, cart, tempo, motorcycle and ship together form a group.

We can call this a group of modes of transport.

Divide this group into smaller groups on the basis of the following characteristics:

- (a) Two wheelers
- (b) Three wheelers
- (c) Four wheelers
- (d) Having wooden wheels
- (e) Having wheels with tyres
- (f) Driven by fuel
- (g) Driven by human or animal power (6)

You have divided a group into smaller groups. These smaller groups within a group are called sub-groups.

A SUB-GROUP HAS TWO CHARACTERISTICS

It is necessary that the members of a sub-group should not only have the characteristics of that sub-group but also of

the main group. For example, you made a sub-group called 'driven by human or animal power'. A plough, too, is driven by animal power.

Can the plough be included in this sub-group? Give reasons for your answer. (7)

Has anything been included in more than one sub-group? Make a list of such things. (8)

Write down the names of kharif crops. (9)

This is a group.

Now make three sub-groups from it. (10)

Sarla made sub-groups from the group of 'things made of plastic in the science kit'. One of the sub-groups was 'in which water can be filled'. In this sub-group she included beaker, plastic glass, measuring cylinder and boiling tube. Kusum told Sarla, "You have made a mistake."

Sarla replied, "No, I have made correct groups."

Look at the four items in the kit and write down whether or not Sarla had made a mistake. Give reasons for your answer. (11)

DISCUSS AMONG YOURSELVES

When Prembai tried to make four equal sub-groups of students of Class 6 she found that the sub-group of students whose height was more than 4 ft 6 inches was one member short. She added the name of her sister to this sub-group to complete it. Her sister is 4 feet 8 inches tall and studies in Class 8.

Should we accept Prembai's sub-group as correct? Discuss this among yourselves and write the answer in your own words, giving reasons. (12)

EXERCISE YOUR MIND

Your class is a group. Think of a characteristic and make a sub-group of this group of which you would be the only member.

Write down the characteristics of this sub-group in your exercise book. (13)

MAKE CORRECT GROUPS AND WIN THE GAME

Here is an interesting game which you can play with your friends.

1. The game can be played between two teams or two persons.

2. Collect about 20-25 things and place them in the middle between the two teams.

3. One team should write down, on a piece of paper, the name of one of the articles placed in the centre. This name should be hidden from the other team.

4. The other team has to ask questions to find out the name written on the piece of paper. For this, they are only allowed to ask questions of the first team. The questions should be such that their answers can only be given as a 'Yes' or 'No'.

For example : "What is the colour of the object?" is not a permitted question and should not be answered. "Is the thing black?" is a permitted question and can be answered 'Yes' or 'No'.

Similarly, "How long is the object?" is not permitted. "Is the object more than 6 cm long?" would be all right.

"Is the object long?" although permitted, is not a good question because the answer can be either 'Yes' or 'No', depending upon what the other team considers is long.

5. The team asking questions gets 1 point for each question asked.

6. After the second team guesses the name of the object, it will be their turn to write down a name and conceal it. The first team will now try to guess the name by asking questions and points will be added to their account for each question asked.

7. The game can be stopped after both teams have been given the chance to guess the same number of answers. The team which scores fewer points wins.

8. Decide among yourselves the penalty for a team that gives a false answer to an allowed question.

9. Choose a referee who will decide whether a question is permitted or not.

10. You can toss a coin to decide which team should get the first turn.



In this game the team which chooses the right characteristics to make correct groups and sub-groups has a better chance of winning because it will have to ask fewer questions.

NEW WORDS

sub-group

