Leisure Loves Performance Station

Introduction:

In the school just down the road from you there are three Grade Five Math teachers, Miss Howe, Mr. Dewey, and Mrs. Kountem. They decided that they would all do a similar activity while teaching their students about surveys.

> **Materials:** calculator, one 6-sided die, crayons (optional), ruler

Procedures and Questions

You are going to create the information for questions #1 and #2 by rolling a 6-sided die.

- You are given the names of the students in Mr. Dewey's Grade 5 class. Beside each student name you will record the name of their favourite leisure activity (as determined by the number you rolled on the die).
- For each student, roll the die once and record the number.
- After recording the number, determine that student's favourite activity by using the information below.

Number Rolled	Favourite Leisure Activity
1	TV
2	Music
3	Sports
4	Books
5	Games
6	Crafts

Record the results for Mr. Dewey's class on the next page.

1. Complete the chart below for the students in Mr. Dewey's class.

Student Name	Number Rolled	Favourite Activity	Student Name	Number Rolled	Favourite Activity
Anne	6	crafts	Ian	2	music
Archie	6	crafts	Jane	6	crafts
Becky	4	books	Jack	6	crafts
Brian	1	TV	Kaylee	3	sports
Chelsea	4	books	Keith	5	games
Curtis	3	sports	Landon	5	games
Daisy	1	TV	Marnie	6	crafts
Dan	5	games	Matthew	6	crafts
Ethan	5	games	Mark	4	books
Fran	1	TV	Nancy	3	sports
Genelle	5	games	Nathan	5	games
George	2	music	Pamela	6	crafts
Hope	1	TV	Riley	4	books
Hannah	4	books	Samantha	1	TV
Harry	3	sports	Trent	2	music

Recall:

Number Rolled	Favourite Leisure Activity
1	TV
2	Music
3	Sports
4	Books
5	Games
6	Crafts

2. In the chart below, find the number of students in Mr. Dewey's class that are interested in each activity. Use the information from the chart you completed in **Question #1**.

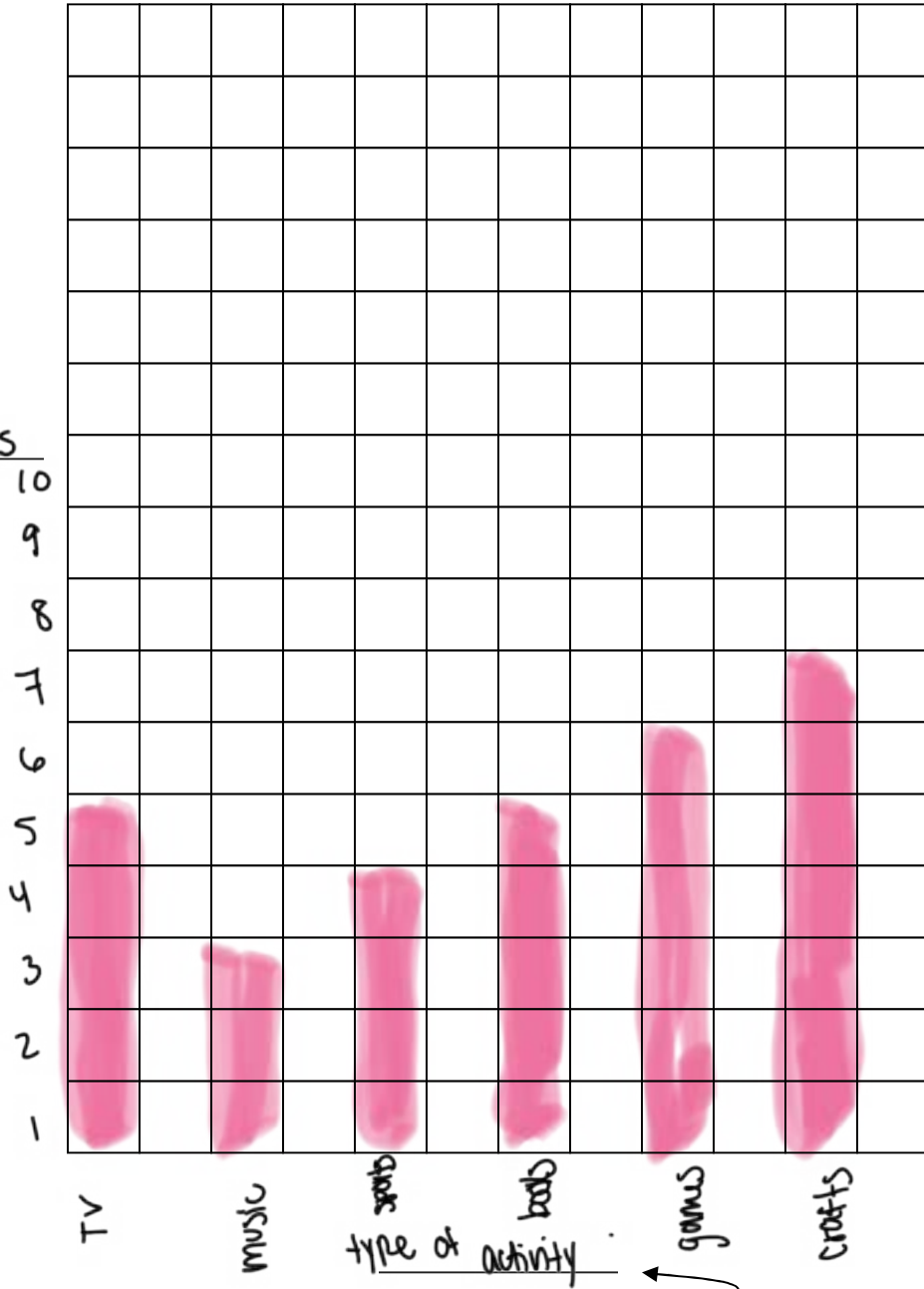| FAVOURITE LEISURE ACTIVITY	# OF STUDENTS
TV	5
MUSIC	3
SPORTS	4
BOOKS	5
GAMES	6
CRAFTS	7

3. On the grid below, draw a bar graph that shows the results from **Question #2**. *Your graph must contain*: the number of students that chose each activity and the names of the favourite activities. Be sure that you have labelled your entire graph. You **may** use colour to help display the information.

Grade 5 Leisure Activities

Label what this side of the graph is.

#of students

10
9
8
7
6
5
4
3
2
1

TV   music   sports   books   games   crafts

type of activity

Label what this side of the graph is.

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4. Mrs. Kountem's Grade 5 class was also surveyed on their favourite activities.   The results are listed in the table below.

FAVOURITE ACTIVITY	# OF STUDENTS
TV	6
MUSIC	3
SPORTS	4
BOOKS	2
GAMES	6
CRAFTS	3

Write a **fraction** that represents the number of grade five students in Mrs. Kountem's class that selected the following.

a) TV

$5/24$

b) Sports

$4/24$

c) TV or Sports

$10/24$

d) Express the fraction of students that selected one of TV or sports in **lowest terms** (simplest terms).

$1/6$

5. Miss Howe's class decided to survey all the grade 6, 7, and 8 students in their school; however, some of the results were lost. Below is a table that shows the information that the students know for sure about each grade.

Use the given information to complete the table below.

$$\text{Average (mean)} = \frac{\text{total number of students}}{\text{number of favourite activities}}$$

Results of Miss Howe's class surveys

	TV	MUSIC	SPORTS	BOOKS	GAMES	CRAFTS	TOTAL # PER GRADE	AVERAGE (mean) # OF STUDENTS PER ACTIVITY
GRADE SIX	7	2	4	9	0	8	30	5
GRADE SEVEN	12	3	10	10	2	5	32	5.3
GRADE EIGHT	8	7	5	9	1	6	36	6
TOTAL # PER ACTIVITY	27	12	19	28	3	19	108	18

Find the total number of students in the three grades.

Find the average (mean) number of students per activity for the three grades.

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