

**Equivalent Fractions**

**Fraction Hopscotch**

**Players: 2**

**Materials: Fraction Hop chart/board, dice**

**Topic: Equivalent Fractions**

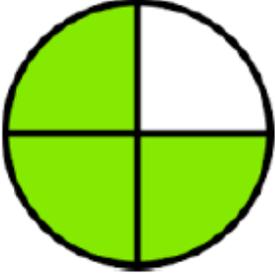
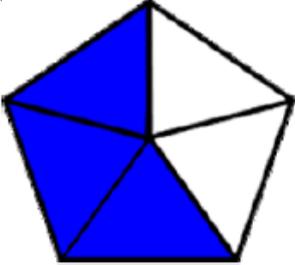
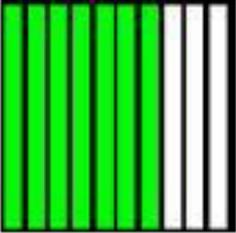
16	17	18	19	20	END
15					
14					
13	12	11	10	9	8
					7
					6
START	1	2	3	4	5

**Procedure**

- Players place their markers on start to begin the game.
- Players take turns to roll both dice.
- The numbers on the dice should be used to form a fraction with the smaller number representing the numerator and the larger number representing the denominator.
- Players should give an equivalent fraction to that represented by the dice.
- If they are successful then they will move their markers; the number of spaces moved will be determined by the number used to represent the numerator.
- If the player fails to give an equivalent fraction he or she loses a turn.
- If the player gets a double (1/1, 2/2, 3/3 ...) the player throws again.
- The first person to reach or pass the end square is the winner.

Worksheet

Draw a diagram depicting fractions equivalent to the one shown.

A	B
 $\frac{1}{2}$	
 $\frac{3}{4}$	
 $\frac{3}{5}$	
$\frac{7}{10}$ 	

## RESEARCH PROJECT

**Objective:** Students should be able to use skills learnt to successfully conduct a research project as well as present findings and make recommendations.

### CONDUCTING THE RESEARCH PROJECT

**Step 1:** place students in small groups

**Step 2:** guide students to decide on a topic of study which should be reflective of students' issues or concerns within the class or school.

**Step 3:** guide students to choose and design the data collection instrument to be used and to select their sample size.

**Step 4:** working in groups students will collect important data about the topic being studied.

**Step 5:** students will sort data collected in a meaningful way to identify patterns and infer theories.

**Step 6:** students will report on the content using appropriate graphs.

**Step 7:** use the information from the graphs to make decisions and also make recommendations that can contribute to the solution of the issues.

RUBRIC CATEGORY	1	2	3	4	5
<b>Statement of Project Topic</b>	Topic is poorly stated and unclear/ topic had to be generated by the teacher	Student requires prompts to generate the topic	Topic is generated by students but shows error in punctuation/ structure.	Topic is generated by student with minor errors in structure	Topic is generated by student and is stated using a complete sentence, an appropriate caption or a question that is clear and understandable.
<b>Data Collection Instrument</b>	No thought was given to the choice of the instrument used and therefore was	Little thought was given to the choice of instrument which was reflected in it being limited in effectiveness	The selected instrument was limited for the data being collected	The selected instrument was a suitable choice for the data collected but not the most effective	The selected instrument is the most effective choice for the data to be collected.

	unsuitable				
<b>Group Work</b>	Student did not work effectively with others	Student was able to work effectively with others on a few tasks.	Student was an engaged partner but had trouble listening to others' suggestions and/or working cooperatively	Student was an engaged partner and showed some willingness to take the suggestions of others in some instances	Student was an engaged partner, listening to suggestions of others and working cooperatively throughout the project period
<b>Selection of Sample Size</b>	The sample size used was far below the expected standard (5 or less)	The sample size used was below the standard. ( 5 to 10)	The sample size used was average (10 to 15)	The sample size used met expectation (20 to 22)	The sample size used met or exceeded expectation (25 or more)
<b>Organization of Data</b>	Lacks organization	Illogical sequence /organization with no evidence of descriptive headings	Illogical sequence with ambiguous headings	Data showed some degree of organization but headings were limited in description	Data collected was well organized using a neat and understandable tally chart with clear headings
<b>Statistical Representation</b>	Diagrams were unclear and were difficult to understand / interpret	Some diagrams were unclear and were without appropriate labels	A few diagrams were clear and only some had labels	Diagrams were clear but some were unlabeled or some labels were ambiguous	Diagrams are clear and well-labeled, and greatly add to the readers' understanding of the findings.
<b>Report on Findings</b>	A conclusion is reached but no recommendation is given	A conclusion is reached and few recommendations are made based on findings	Some conclusions and recommendations are made, however some are	Many conclusions and recommendations made are practical, logical and based on	All conclusions and recommendations made are practical, logical and based on

			impractical and irrelevant to the findings	findings.	findings
<b>Neatness and Organization</b>	Almost all aspect of work presented are unclear and unorganized	Most aspects of work presented are unclear and unorganized	Some aspects of work presented are not clear and somewhat unorganized	Most aspects of the work are presented in a neat, clear, organized fashion that is easy to read	All aspects of the work are presented in a neat, clear, organized fashion that is