

LESSON PLANS: ALBERTA

Grade 2: Statistics and Probability

 45-50 MINS

powered by

 Mathletics

General Outcome:

- Collect, display and analyze data to solve problems.

Specific Outcomes:

- Construct and interpret concrete graphs and pictographs to solve problems.
- Gather and record data about self and others to answer questions.

Introduction to Lesson

 10-15 MINS

Teacher Background:

Ask the class what their favorite school subject is. Collect some data and discuss ways this data can be displayed. Depending on the students' prior knowledge, they might say charts, graphs, a picture, tallies, or writing the data down using a sentence.

Ask students what they think a pictograph is.

- Why would it be used?
- What kind of information can it display?

On your interactive whiteboard, go to

Teacher Console > Demonstrations > Concept Search > Animated Maths Dictionary.

Search the term pictograph and discuss the definition. If students have individual journals or dictionaries, have them write down the definition.

On the interactive whiteboard, go to

Teacher Console > Demonstrations > Concept Search > Concept Search.

In the **Search** field, search pictograph. This will bring up an interactive slide. For the first side you can ask the class what items of fruit they have in their lunch boxes. Click on the name of each fruit and it will be displayed within the chart. After the data is collected, ask the students questions based on the data that was just collected.

ITEMS NEEDED

- ✓ Interactive whiteboard
- ✓ Mathletics teacher login
- ✓ Mathletics student login
- ✓ Manipulatives
- ✓ Student handout from eBooks pages 14-16
- ✓ Math journals
- ✓ Computers/mobile devices.

ASSESSMENTS

- ✓ Observation
- ✓ Participation
- ✓ Reviewing completed worksheets.
- ✓ Reporting results within the Teacher Console of Mathletics for curriculum.
- ✓ Graphs created by the students
- ✓ Teacher assessments in the teacher eBook- Year 1 Chance and Data, page 29

ACCOMMODATIONS/ MODIFICATIONS

- ✓ Create centre groups according to heterogeneous grouping.
- ✓ Encourage students to click on "Something Easier" and "Something Harder" within the Mathletics curriculum activities.
- ✓ Print out student worksheets from lower or higher grades.
- ✓ Provide various manipulatives.

EXTENSION OF LEARNING

- ✓ Curriculum activities
- ✓ Extra worksheets from eBooks
- ✓ Rainforest Grade 1: Data
- ✓ Live Mathletics

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The Lesson

 30-35 MINS

Centres

- **Background for teacher**—You can add more centres to the ones indicated below. For the eBook centre, please review which pages you would like the students to complete. Depending on how much work students can get done with each centre, centre rotation can be about every 10 minutes. Groups will vary depending on class size.



- o **Centre 1:** Computers/tablets—Students complete curriculum activities within the student Mathletics site. Suggested activities under Statistics and Probability: Who has the Goods, Pictographs, Sorting Data and Make Graphs.
- o **Centre 2:** eBooks—page 14–16 in the year 1 Chance and Data student booklet. Student can work in pairs or complete individually.
- o **Centre 3:** Creating a Graph—Students create their own question and collect their data within the classroom. Students then can display the data with manipulatives provided by the teacher. This centre is for the construction of concrete graphs. If students need help with a model, have them click on Concept Search within their Student Console and search pictograph. Students are encouraged to collect data based on Mathletics. Questions could be around their favorite part in Mathletics: the items they like to buy with their credits, the certificates they earned, and so forth.

- **Extra-time activity/cross-curriculum activity:** Collect Mathletics certificate data. Have the students collect the Mathletics certificates they earned. Brainstorm as a class on the best way to display this data in the classroom. Students can create their own pictures of the certificates they earned and place them on the classroom chart. This chart can be updated throughout the year!

After the lesson

 5 MINS

- Have the students share with a partner sitting beside them what they learned today. Have them discuss key concepts, such as how they collected the data, what a pictograph is, how they created their graphs, did they find anything interesting in the data, and so forth.
- Teachers can also close the lesson with the one-page assessment located in **eBooks > Year 1 > Chance and Data > page 29**.



For more information contact our friendly team...

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