## LESSON PLANS: ALBERTA

## Grade 3: Shape and Space

## 45 MINS

## General Outcome:

- Describe the characteristics of 3D objects and 2D shapes, and analyze the relationships among them.


## Specific Outcomes:

- Describe 3D objects according to the shape of the faces and the number of edges and vertices.


## Introduction to Lesson

## 10 MINS

## Teacher Background:

Recall prior information by having a class discussion about 3D objects and their characteristics. Questions to prompt prior learning, I am shaped like a soccer ball, or, I have a pointy top and I can roll. What am I? On the board write down faces, edges and vertices. Ask Does anyone know what these words mean?
On the interactive whiteboard ,bring up Concept Search, located under Teacher Console > Demonstrations > Concept Search > Concept Search.

Click on Concept Search and search the words edges, faces, vertex. Each slide will explain a definition along with pictures. Discuss while viewing all slides, or have students write down the definitions in the Math dictionaries.

## Questions to ask:

- How are the shapes similar or different?
-What 2D shapes do you see in these objects?
- How can you describe a face, edge, or vertex to a partner?
- How many vertices, edges and faces does a sphere have? cylinder? cone?


## Lill. items needed

$\checkmark$ Interactive whiteboard
$\checkmark$ Mathletics teacher login
$\checkmark$ Mathletics student logins
$\checkmark$ eBook student pages from grade 3,
Space and Shape
$\checkmark$ Shape manipulatives/nets
$\checkmark$ Math journals
$\checkmark$ Computers/mobile devices

## EO <br> ASSESSMENTS

$\checkmark$ Observation and participation

- Reviewing completed student worksheets
- Results from the Mathletics curriculum activities, located under Reports in Teacher Console
$\checkmark$ eBook assessment page 35 from teacher book

o

## ACCOMMODATIONS/

 MODIFICATIONS$\checkmark$ Provide students with manipulatives
$\checkmark$ Provide students with extra worksheets from grade 2 or 4 Shape and Space 3D shapes.
$\checkmark$ Encourage students to click on "Something Easier" and "Something Harder" within the Mathletics curriculum activities.

[^0]
## LESSON PLANS: ALBERTA

## Grade 3: Shape and Space



## The Lesson

## Rainforest Maths

- Investigate: "Rainforest Maths"-Students are to investigate further within "Rainforest Maths." Have students work with partners.
- Teachers can encourage students to record their information in the math journals.
- Direct them to click on Rainforest Maths > Grade $3>3 D$ shapes.
- There are several options for them to explore. Students can review 3-D shapes first by clicking on the "3D" and "About" icons on the left side and then carrying on with the other areas.
- After students have had time to explore, have them share the information they found with the class.
- Apply: eBooks-Have students complete the student pages within the eBooks > Grade $3>$ Space and Shape. Recommended pages are 14-24.
- Reinforcement: : Using computers or mobile devices. Students complete curriculum activities in the Student Console.
- Suggested activities: Relate shapes and Solids; Faces, Edges and Vertices; Prisms and Pyramids; Count Sides and Corners.
- Extra-time activity/cross-curriculum activity: Nets-Students can create 3-D nets to further their extension. Students can label and record all the edges, faces, and vertices.



## After the lesson

- Hold up objects found in the classroom and have the students identify where the edges, vertices, and faces are.
- Have students bring in disposable objects from home that are three dimensional. Students will disassemble the boxes that were brought from home. This will allow students to view the structure of these objects and analyze the edges, faces, and vertices.


[^0]:    层 EXTENSION OF LEARNING
    $\checkmark$ Curriculum activities
    $\checkmark$ Explore more in Concept Search and Rainforest Maths
    $\checkmark$ Live Mathletics

