DISCOVERING 3 D SHAPES

LESSONS PLANS

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TEACHING AIMS

*To know the differences between 2D and 3D shapes
*To know the most common 3D shapes.

LESSON 1

SESSIONS 1 TO 5

TIME: 1 HOUR EACH.

COMPETENCES

*Communicative. Relate observations, explanations. Interaction with other people.
*Mathematical: interpret different types of mathematical observation. Reason mathematically.

LEARNING OUTCOMES

Will know: *Differences between 2D and 3Dshapes.
* The names of the common 3D shapes.
* 3D shapes in our daily life.

Will be able to: *Identify, classify, describe, the different 3D shapes.

**Will be aware of: ***How to cooperate in a group
*How 3D shapes are present in our daily life.

COGNITION

*Recognizing
*Memorizing
*Classifying
*Comparing

3D shapes

CONTENT

*3Dshapes: their names, and construction.
*Properties of 3D shapes: faces, vertex, edges,
*Classification of 3D shapes using various attributes

CULTURE

*3D shapes in our daily life: containers

COMMUNICATION

Language of learning: content vocabulary: cube, ,triangular prism, rectangular prism, cone cylinder, pyramid, sphere,… square, circle, pentagon hexagon,… edge, vertex face.,
Structures: It is a cube. Who has the hexagonal pyramid?. This shapes _____because it has_____,
To construct a pyramid you need…… A sphere is a 3D shape with 1 curved surface

Language for learning: Describing 3D shapes.
Asking and answering. Giving reasons.

ASSESSMENT

Can the students:
*Discriminate 3D shapes from 2D shapes.
*Label different 3D shapes.
*Identify the different parts of a 3D shape.
*Classify 3D shapes according to different criteria.
*Work out what some 3D shapes have in common

TEACHING AIMS

*To know the nets of some 3D shapes
*To know regular polyhedrons.

LESSON 2

SESSIONS 1 TO 6

TIME: 1 HOUR EACH.

COMPETENCES

*Communicative. Relate observations, explanations. Interaction with other people.
*Mathematical: interpret different types of mathematical observation. Reason mathematically.

LEARNING OUTCOMES

Will know: *Nets of 3D shapes
* The names of the common regular. polyhedrons

Will be able to: *Identify the nets of the 3D shapes.
*Construct 3D shapes with different materials.

Will be aware of: * How we can construct a 3D shape with a flat surface.

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COGNITION

*Recognizing
*Memorizing
*Classifying
Regular polyhedrons
*Predicting (what is needed to construct a 3D shape)

CONTENT

*Nets of the 3D shapes.
*Regular polyhedrons, construction and classification.
* Parts of a 3D shape: edges, vertices, faces.

CULTURE

*3D shapes and origami
*3D shapes in our daily life

COMMUNICATION

Language of learning: content vocabulary: cube, triangular prism, rectangular prism, cone cylinder, pyramid, sphere,… square, circle, pentagon hexagon,… edge, vertex face, tetrahedron, hexahedron, icosahedron, dodecahedron, octahedron..,
Structures: An (octahedron) has (8) triangles. If I look at the (square pyramid) from above I can see a (square) . A rectangle could be a (prism) from (in front)
Do you have any triangles?. How many faces do you have?
It has (8) edges, and (5) corners.

Language for learning: Describing. Asking and answering

ASSESSMENT

Can the students:
*Recognise the nets of 3D shapes.
*Label different regular polyhedrons.
*Identify the different parts of a 3D shape.
*Construct regular polyhedrons
*Cooperate and work in a group

TEACHING AIMS

*To recognize that shapes are common in our local area
*To be creative: Design a 3D object.

LESSON 3

SESSIONS 1 TO 4

TIME: 1 HOUR EACH.

COMPETENCES

*Communicative. Relate observations, explanations. Interaction with other people.
*Mathematical: interpret different types of mathematical observation. Reason mathematically.

LEARNING OUTCOMES

Will know:. London and its buildings

Will be able to: *Identify 3D shapes in the buildings and in the pieces of street furniture.
*Design a regular 3D shape object

Will be aware that our world has many examples of 3D shapes.

COGNITION

*Analysing | 3D shapes (found into
*Classifying | the buildings)
*Comparing the 3D shapes found in the local area, from London.
*Generating ideas to design an object.

CONTENT

*Drawing of 3D shapes..
*Drawing buildings or street furniture
*Design an object (cross-curricular).

CULTURE

*3D shapes in our local are
*3D shapes in London
*3D shapes in our daily life
*Respect and value of others opinions and pieces of work.

COMMUNICATION

Language of learning: content vocabulary: cube, triangular prism, rectangular prism, cone cylinder, pyramid, sphere,… square, circle, pentagon, hexagon,… edge, vertex face, tetrahedron, hexahedron, icosahedron, dodecahedron, octahedron..,
Structures: We found (1,2,3,4..) cylinder/s, cube/s, prism/s. : I designed a _____ . It is used for_____. I think it can be made of (plastic, paper, stone, clay,) Do you have any triangles?. How many faces do you have?

Language for learning: Describing
Asking and answering:

ASSESSMENT

Can the students:
*Identify 3D shapes in buildings.
*Draw 3D shapes.
*Design an object
*Cooperate and work in a group.
Self assessment