Day/ Date	Monday/ October 8 th , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To know the vocabulary used to describe 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Use the proper vocabulary for 2D shapes (corner, sides, parallel, lines of symmetry, angles - acute, obtuse, right-angled) Use the proper vocabulary for 3D shapes (vertex, edge, face, apex)
Language focus	equal sides, parallel side, quadrilateral, symmetry, angle
Resources	Students prior knowledge, PPt presentation Shapes in real life, PPt quiz 2D shapes and Guess the shape 2", (See in the Resources file under Space and shapes)
Interaction	Individual task, class sharing time
Learning Stages	 Opening : Ask students to list down some 2-D shapes that they have known in their life Teaching : To review briefly about 2D shapes, we show slides of <u>shapes in real life</u>. (Resources: PPt presentation) In class discussion, we introduce properties of all 2D shapes (sides, corner). Then, we show slides of <u>play guess the 2D games</u> and ask them to find the answers as a strategy to deepen their understanding on 2D shapes properties. Closing/reflection: Most of the students understand 2-D Shapes properties.

Day/ Date	Wednesday/ October 10 th , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To know the vocabulary used to describe 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Use the proper vocabulary for 2D shapes (corner, sides, parallel, lines of symmetry, angles - acute, obtuse, right-angled) Use the proper vocabulary for 3D shapes (vertex, edge, face, apex)
Language focus	Equal side, parallel side, angle, equal length, straight Sides, curve edge
Resources	Students prior knowledge, Smart board "shapes matching", (See in the Resources file under Space and shapes)
Interaction	Individual task, class sharing time
Learning Stages	 Opening : In class discussion students list down the characteristic of rectangle and square. Teaching : We ask them to make a table of 2D shapes properties and complete the table by sticking pictures of 2D shapes on the table, write the names and list all properties of 2D shapes. As a practice, we deliver a <u>quiz of 2D shapes</u>. Closing/reflection: Most of the students understand well the characteristic of 2-D shapes by looking at : sides, corner, parallel lines, symmetrical line, angle,

Day/ Date	Friday/ October 12 th , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To know the vocabulary used to describe 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Use the proper vocabulary for 2D shapes (corner, sides, parallel, lines of symmetry, angles - acute, obtuse, right-angled) Use the proper vocabulary for 3D shapes (vertex, edge, face, apex)
Language focus	Equal side, parallel side, angle, equal length, straight Sides, curve edge,
Resources	Students prior knowledge, Pdf (2-D shape definition flash card, properties of regular shapes, 2-D shapes extensions) See the data in the Resources file under Space and shapes, some 3-D shapes
Interaction	Individual task, class sharing time
	Opening : In pairs students give a question about2-D shape based on the characteristic that they have known (how many sides, the characteristic of the line, angle in the shape, etc) Teaching :
Learning Stages	 To develop their abilities in defining any of 2D shapes, students, in groups, play <u>definition flash cards</u>. Ask students to define any of 2D shapes based on their understanding on properties of 2D shapes. They write the definitions of 2D shapes on maths squared paper. (*<u>as an enrichment</u> Closing/reflection: Students enjoy the activity when working in partners and in groups because they can show their cooperativeness by helping their friends who still confuse about 2-D shapes.

Day/ Date	Monday/ October 15 th , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To be able to draw 2D shapes using maths tools with precisions
WILF (What I'm looking for)	 Students are able to: Use a pair of compass and a ruler properly Demonstrate procedures to use these maths tools in drawing particular 2D shapes
Language focus	equal sides, parallel side, quadrilateral, symmetry, angle
Resources	Students prior knowledge, drawing shape using compass video (V:\Multimedia\PYP\2011- 2012\PYP 5\Video\Math\Video about shapes)
Interaction	Individual task, class sharing time
Learning Stages	Opening : Ask students to draw 2-D shapes using a pair a compass as their practice without the teacher explanation Teaching : > Show some videos how to draw 2-D shapes using a pair a compass > Class discussion about the video and find the strategies Closing/reflection: > Visual learners' students enjoy the movie and understand how to draw easily. Some students still struggle with it.

Day/ Date	Wednesday/ October 17 ^{tn} , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To be able to draw 2D shapes using maths tools with precisions
WILF (What I'm looking for)	 Students are able to: Use a pair of compass and a ruler properly Demonstrate procedures to use these maths tools in drawing particular 2D shapes
Language focus	equal sides, parallel side, quadrilateral, symmetry, angle
Resources	Students prior knowledge, drawing shape using compass video (V:\Multimedia\PYP\2011- 2012\PYP 5\Video\Math\Video about shapes)
Interaction	Individual task, class sharing time
Learning Stages	 Opening : Ask students to list down some 2-D shapes that they have known in their life Teaching : (done by : Mr. Sam in one lesson and I continue the other one lesson) Draw precisely all 2D shapes using maths tools . (Circle, perpendicular line, Isosceles right triangle, square, Isosceles triangle, equilateral triangle, rectangle) They have to follow teachers guidance/instruction on how to draw them using maths tools. Closing/reflection: Some students still have difficulties with their fine motor skill. They need more time to finish their task (Nigel, Shannon, Javier, Jack, BJ, Bryan)

Day/ Date	Friday/ October 19 th , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To be able to draw 2D shapes using maths tools with precisions
WILF (What I'm looking for)	 Students are able to: Use a pair of compass and a ruler properly Demonstrate procedures to use these maths tools in drawing particular 2D shapes
Language focus	equal sides, parallel side, quadrilateral, symmetry, angle
Resources	Students prior knowledge drawing shape using compass video (V:\Multimedia\PYP\2011- 2012\PYP 5\Video\Math\Video about shapes)
Interaction	Individual task, class sharing time
Learning Stages	 Opening : Ask student to draw some 2-D shapes that they have learnt before using a pair of compass. Teaching : (done by : Mr. Sam in one lesson and I continue the other one lesson) Class discussion how to draw 2-D shapes that they have to learnt before to know their understanding of it Draw precisely all 2D shapes using maths tools (Hexagon, pentagon). They have to follow teachers guidance/instruction on how to draw them using maths tools. Closing/reflection: Students still can finish how to draw the pentagon, because they need more time to finish the hexagon.

Day/Date	Monday/ October 22 nd , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To understand the connections between 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Differentiate between 2D and 3D shapes Explore the nets of different 3D shapes Draw the net of particular 3D shapes
Language focus	Vertices, edges, faces
Resources	Students prior knowledge, Play guess the 3-D shapes, properties of 2D 3D ppt. (see in PYP 5, core subject, space and shape, 2-D and 3-D shapes resources)
Interaction	Individual task, class sharing time
Learning Stages	 Opening: Class discussion about Basic fact Teaching : understand that 2D representations of 3D objects can be used to visualize and solve problems <i>Play guess the 3D games from powerpoint-pre-assessment.</i> Students bring any 3-D shape objects from home and the class (e.g. pencil case, paper box, analyze and identify all 2-D shapes in the object, ask students to keep it for later Students are introduced to 3-D shapes, they are: rectangular prism, cube, triangular prism, pyramid, etc. Teachers may use 3D blocks to explain about vertex, edges, and faces in 3D shapes. Use the powerpoint in public new/PYP 5/homeroom subjects/math/2d and3D shape/properties_of 2D 3D_Shapes.ppt Closing/reflection: Students can list down what 2-D shapes in their 3D shapes object that they bring. They can mention the

Day/Date	Wednesday/ October 24 nd , 2012
Time Allotment	90 minutes
WALT (We are Learning to)	To understand the connections between 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Differentiate between 2D and 3D shapes Explore the nets of different 3D shapes Draw the net of particular 3D shapes
Language focus	Vertices, edges, faces
Resources	Students prior knowledge, 3-D shapes real object
Interaction	Individual task, class sharing time
Learning Stages	 Opening: Class discussion about Basic fact Teaching: Class discussion the thinking tools that students need to show the connection between 2-D shapes and 3-D shapes use 2D representations of 3D objects to visualize and solve problems, for example using drawings or models To introduce how to make 3D net, students will use their 3D shape object that they have analyzed before. They will try to guess it first how it look like when it is flat (2D) or how the net look like. After that they open the 3D object they have and analyze the 3D net. Then they can display their result into A 3 paper along with explanation of the vertex, edges and faces and also what kind of 2D shape that form the 3D shape. Students create square pyramid or rectangular prism or triangular prism or cube (there must be 3 shapes). In the project they have to write the basic criteria of the shapes (face, vertex, edges) and additional criteria (write 2-D that build 3-D shape) Present their result by exhibiting gallery walk Closing/reflection: Students can explain their reason of thinking tool chosen, such as : Ela chose mind mapping because she will make an analysis mind map to show the relationship of 2-D and 3-D shapes. Enzo choose analysis in taxonomy bloom, because he will analyze what are the relationship between 2-D and 3-D shapes.

Note : Friday, October 26, 2012 Idul Adha holiday Monday, October 29th, 2012 and Wednesday, October 31st, 2012 do not have any math lesson for summative presentation

Day/Date	Friday/ November 2 nd , 2012
Time Allotment	90 minutes
WALT	
(We are Learning to)	To understand the connections between 2D and 3D shapes
WILF (What I'm looking for)	 Students are able to: Differentiate between 2D and 3D shapes Explore the nets of different 3D shapes Draw the net of particular 3D shapes
Language focus	Vertices, edges, faces
Resources	Students prior knowledge, 3-D shapes real object and 3-D shapes net
Interaction	Individual task, class sharing time
Learning Stages	 Opening: Class discussion about Basic fact Teaching: Sharing their homework, what difficulties that they found Draw their Summative project in their maths book Students model 3D shapes (students create a combination of 3 shapes nets from hard paper and building an object) Criteria: Create/trace their own net (3 kinds of 3D shapes) Identify each types of 3d shapes using geometry vocabulary >Closing/reflection: Some students really show their creativeness by create their summative project of 3-D shapes.