

Lesson Plan

Supervisor: Dr LAM Bick Har

Topic: Airplane (Fly the airplane)

Level: K3 students (5-6 years old)

Subject: Early Childhood Education (Theme activity)
minutes

Time of lesson: 40

Learning objectives:

Knowledge:

- 1.Children are capable to recognize the features of the parts of the airplane (cockpit, body, wings, tails, engines, landing gears).
- 2.Children can understand how the planes fly with engines through scientific experiment.

Skills:

- 1.Children are capable to use different measurement tools (straws, ropes and coins) to do an experiment on the engine of airplane.
- 2.Children are capable to discuss and cooperate with peers.

Attitude:

Children are actively participating in exploratory activity.

Teaching resources:

- Pictures (things we use during traveling, i.e. luggage, passport, foreign currency)
- A world map
- Online game
- Toy airplanes
- A picture of airplane
- Straws
- Ropes
- Coins
- Portable mini fans

- Recording sheets
- Assessment form

Teaching process:

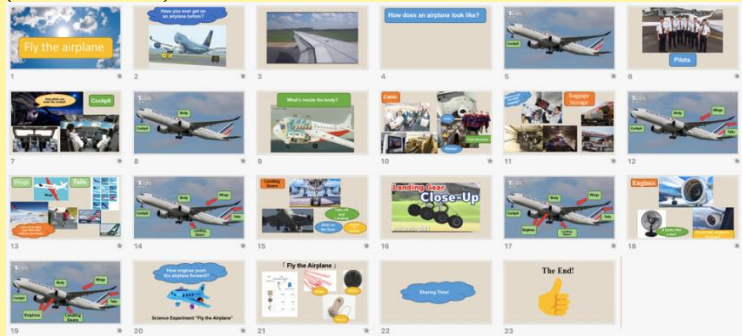
Teaching procedure and Purposes	Learning Activities
<p><u>1. Introduction (3mins)</u></p> <p>-Theme will be introduced to children by asking them a question related to their life.</p>	<p>- Teacher asks: ‘ Children, do you have anything you really want to do after all these days staying at home?’</p> <p>- Teacher shows the pictures of the things we use during traveling, such as luggage, in order to let children guess what teacher wants to do the most.</p> <div data-bbox="824 772 1383 991" data-label="Image"> </div> <p>- Teacher shows a world map and asks children, ‘If we want to different countries, such as from Hong Kong to the States, is the distance going to be far? What transportation should we take to go there?’</p> <div data-bbox="734 1138 1458 1549" data-label="Image"> </div>
<p><u>2. Development (35mins)</u></p> <p>-Children can distinguish the features and functions of the parts of the airplane.</p> <p>-Children use different measurement tools to find out</p>	<p>- Teacher turns on the online game, invite one child to fly the airplane in the game, other children observe the parts of the airplane and share with the others (cockpit, body, wings, tails, engines, landing gears)</p>

which methods can move the toy airplane the farthest and record the results on the worksheet.



<https://www.topspeed.com/aviation/aviation-games/free-flight-sim-ar181405.html>

- Teacher shows real pictures and videos to discuss with the children about the functions of the parts of an airplane (Cockpit, body, wings, tails, engines, landing gears).
(PowerPoint)



Cockpit: Where the pilot flies the airplane

Body: Carries passengers, flight attendants and loads and the facilities for the passengers to enjoy, such as the toilet, little TV etc.

Wings: Lift and hold the airplane to fly in the sky

Tails: provide stability for the airplane to keep it flying straight, usually have the logos of the airline on it

Landing gears: to support the airplane for takeoff and landing

<https://youtu.be/DFOynlRYT54>

Engines: look like a big fan, to provide the energy push the plane forward and fly








- Children do a matching game in groups as a review
- Teacher concludes the parts of an airplane by showing a picture of airplane and allows children to differentiate them by telling the functions of each part.
- Teacher gives children a mission: ‘how to move the toy plane forward?’
- Group activity (5 children in a group): Scientific experiment ‘Fly the Airplane’ (‘大風吹’)
- Children in each group use 2 methods to move the toy airplane forward by blowing and the electric fan. Then, they use straws, ropes and coins as measuring tools to measure the distance between the toy airplane and the starting point. They need to record the results on the recording sheets. Finally, compare the methods and find out which method can move the airplane the farthest and which tools is the best for measuring and the reasons.



Name : _____ Date : _____

「Fly the Airplane」 Worksheet

Measurement tool	Method	
	 Blowing	 Using Portable Mini Fan
 Straw	straw(s)	straw(s)
 Coin	coin(s)	coin(s)
 Rope	rope(s)	rope(s)

- Sharing sessions of the results by the children.

3. Conclusion (2 mins)

-Children can tell how engines move the airplane forward.

- Teacher sums up the experiment results with children, it shown that objects move farther away by stronger wind. The use of an engine is same as a fan, the strong wind that produced by the engine pushes the airplane forward in the sky.

- Teacher points out that the best measurement tool is straw, as it is neither too hard nor too soft and the length of it is appropriate. The more straw we use in the experiment has represent farther the toy airplane can go, which make it easier to compare the distance between the starting point and the airplane.

- Teacher concludes the class: ‘Today we learned how engines move the airplane forward through the experiment. Let's try it again with mommy and daddy at home and introduce the theory to them!’

Appendix

Appendix 1: Pictures (things we use during traveling, i.e. luggage, passport, foreign currency)



Appendix 2: A world map



Appendix 3: Online game

<https://www.topspeed.com/aviation/aviation-games/free-flight-sim-ar181405.html>



Appendix 4: Videos of landing gears

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CHAN Po Hang, CHO Ming Yan, HE An-Qi, NG Yuk Ching



Course Materials for use in
TLS3008, TLS6036, and TLS6065 only
Lesson Design Thinking Project (TDG)



<https://youtu.be/DFOynlRYT54>

Aircraft Landing Gear



Appendix 5: A picture of airplane



Appendix 6: PowerPoint (real pictures and videos of airplane)

Appendix 7: Materials for science experiment ‘Fly the Airplane’ (‘大風吹’)



Portable Mini Fan



Straw



Coin








Rope

Appendix 8: Recording sheet

Name : _____ Date : _____

「Fly the Airplane」 Worksheet

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 Coin	coin(s)	coin(s)
 Rope	rope(s)	rope(s)

Appendix 9: Assessment form

Assessment form					
Category	Assessment content	Methods	Children's performance		
			Independent	With help	Children's behavior
Knowledge	Child can point out the parts of the airplane (cockpit, body, wings, tails, engines, landing gears).	Ask questions, observation			
	Children can name the parts of the airplane. (cockpit, body, wings, tails, engines, landing gears).	Ask questions, observation			
	Child can tell the functions of the parts of an airplane (cockpit, body, wings, tails, engines, landing gears).	Ask questions, observation			
	Child can tell how engines makes plane fly.	Ask questions, observation			
Skills	Child can use different measuring tools (straws, ropes and coins) to explore and compare.	worksheet, observation			
	Child is able to record the results observed during scientific experiment.	worksheet, observation			
	Child is willing to discuss and cooperate with their peers to complete scientific experiment.	worksheet, observation			
Attitudes	Child can actively use different measuring tools to explore and compare two methods which can make the toy plane fly farther.	Ask questions, observation			
Comments:					