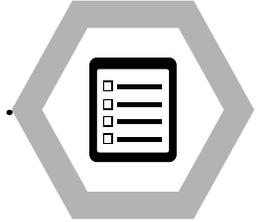


Lesson 2:

Look Out Below . . . World Geography!

PRE-FLIGHT CHECK



1. Topics You Will Cover:

- Review what the students covered while you were away.
- Explain why airports use 3-Letter City Codes and share some cool trivia about where those codes come from.
- Explore the five different time zones that Southwest Airlines operates in and how to calculate time changes.
- Re-visit the Adopt-A-Pilot **F.L.I.G.H.T.** Values examining the value of **IMAGINATION.**

Geography is a core curriculum topic for fifth-grade. This lesson is a great opportunity for the students to learn how to calculate time changes and examine basic geography using Southwest's route map.

2. Materials You Will Need

Review

- Student Workbook
- Trip Sheet your class used for **LESSON 1A: WHILE THE PILOT IS AWAY. . WHERE IN THE WORLD?**
- Adopt-A-Pilot Classroom Map (in the Teacher's Program Supply Box)

Cruise - Through Time

- Student Workbook
- 3-Letter City Code Chart (in the Addendum)
- Adopt-A-Pilot Classroom Map (in the Teacher's Program Supply Box)



TAKE-OFF

Lesson Guide for Your Classroom Visit



1. Reconnect and Review

- Review **LESSON 1: TAKE-OFF WITH ADOPT-A-PILOT!**
 - Invite a few students to share their **1ST SOLO FLIGHT - WHEN I GROW UP, I WANT TO BE...** activity.
 - Did anyone change their mind and/or decide what they want to be when they grow up?
 - Are there any skills or subjects they could learn/practice now to help them on their way?
 - How will they practice these skills?
 - What classes could they take in middle and high school?
 - Who wants to go to college out of state, out of the country, or close to home?
 - What does each letter of the **F.L.I.G.H.T.** Values mean and how did they demonstrate **FEARLESSNESS** and **LEADERSHIP** while you were away?
- If the class is participating, discuss what they discovered in **LESSON 1A: WHILE THE PILOT IS AWAY...WHERE IN THE WORLD?**

Note: Doing your own calculations before class will help guide this activity.

- Some fun facts to share:
 - The Mississippi River is 2,348 SM long
 - Mt. Whitney (in California) is the highest point in the continental United States at 14,505 SM
 - The first skyscraper was built in Chicago in 1885
 - Texas is known for its oil industry - a great career field.
 - More facts can be found at: <http://www.50state.com/facts/>
- Share any pictures or souvenirs.
- Do the students have any questions before you get started?

2. Explain 3-Letter City Codes

- Airports use abbreviations to provide an unambiguous way to identify every airport in the world. They are faster to type and can be easier to say; LAX vs Los Angeles International Airport.
- The current 3 letter combination was started in the 1930's with the growth of civil aviation. In general most 3-Letter City Codes are obvious. They use the first 3 letters of the airport name or the city where it is located. (i.e. SAN - San Diego, ATL - Atlanta, BOS - Boston). Because certain letters (like N) are reserved for military airports, some airports are not so obvious. (i.e. EWR - Newark, ORF - Norfolk). In rare cases, the 3-Letter City Code makes no sense unless you know the airports history. (i.e. MSY: New Orleans - built on the old Mosiant Stock Yards).



- Information about most 3-Letter City Codes Southwest flies to can be found at: <http://airportcod.es/>

3. Introduce Geography from a Pilot's perspective

- How do you experience geography first hand?
 - Describe (or show pictures) of rivers, lakes, mountains, towns (during the day and night), etc. from FL370.
 - How does the weather vary between locations (i.e. winter in New York vs. winter in Phoenix).
 - How do regions differ (food, culture, landscape, languages, etc.).

4. Time Zones Overview

- Introduce the basics of time zones:
 - *Time Zones: any region that uses the same standard time.*
 - The world's time zones are measured from the Prime Meridian in Greenwich, England.
 - Each time zone is defined by how far away it's located from Greenwich, England.
 - Each time zone has its own unique name.
 - Time zones came to be because of the railroads. More information on this can be found in the Student Handbook.
- Show the time zone lines on the Adopt-A-Pilot Classroom Map. Today you will be looking at five time zones: Pacific, Mountain, Central, Eastern, and Atlantic.

5. IN-CLASS STUDENT ACTIVITY: CRUISE - TIME TRAVEL

- Calculating time changes is an essential part of your life at work and home.
- Often this is a difficult concept for students to understand.
- One of the easier ways to teach time changes is by using a map and a clock.
 - **Step One:** Locate which time zone Location A is in.
 - **Step Two:** Locate which time zone Location B is in.
 - **Step Three:** Count the number of time zone lines between Location A and Location B .
 - **Step Four:** Determine if you traveled from east to west or from west to east.
 - **Step Five:** Calculate the time change
 - Traveling from east to west - count 'backwards' (counter clockwise): Starting at the time in Location A count 'backwards' (counter clockwise) the number of time zone lines crossed to determine the time in Location B.
 - Traveling from west to east - count 'forwards' (clockwise): Starting at the time in Location A count 'forwards' (clockwise) the number of time zone lines crossed to determine the time in Location B.
- This activity has three parts, exploring time zones and working through several time change problems.

6. The Adopt-A-Pilot F.L.I.G.H.T Values

- Lesson focus - **IMAGINATION**: *noun/ the action of forming new ideas, images or concepts*
- **IMAGINATION** is ‘seeing’ objects, places, and things you have not seen.
- Have a discussion with the students about **IMAGINATION**. How do they use their imagination in school, or at home to solve problems?
- What does **IMAGINATION** mean to them? Why is imagination useful?
 - The current time zone system was created because railroad owners were imaginative.
 - Ask the student to tell you about a time they used their imagination to resolve a conflict.

LANDING

Wrapping Up Your Classroom Visit

- Introduce the **AT HOME ACTIVITY: 2ND SOLO FLIGHT - A JOURNEY THROUGH TIME**.
- What did they learn today? What else would they like to know about time zones?
- What have they liked about Adpot-A-Pilot so far?
- Emphasize the importance of **IMAGINATION** and all the **F.L.I.G.H.T** Values. Which values did the students use today?
- Give them a glimpse of the next time you will be in class - Science and how it relates to aviation.
- Discuss where you will be flying between now and your next visit.
- If they are participating in the ‘**While The Pilot Is Away**’ activity do they have questions?
- Thank the students and teacher; let them know you appreciate their **IMAGINATION**.



POST FLIGHT CHECKLIST

A Briefing For Your Next Visit

- If the class is participating, discuss **LESSON 2A: WHILE THE PILOT IS AWAY. . . HAVE THE COURAGE TO SOAR**.
Make sure they have a copy of your trip sheet and answer any questions.
- Review the next lesson, gather any materials you will need and what is the best way to approach the material.
- Be prepared to connect with the students between visits:
 - Send emails or postcards.
 - Take photos, videos, or collect souvenirs to share.
 - Arrange a time to call or Facetime®.

