





**Based on the Essential Understandings, Essential Skills and Essential Vocabulary from the**

**Common Core Standards**

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**Touring Washington DC By the Angles**

**Directions:**

**1. Use the masking tape to create the road map of Washington DC that appears below.**

**Note: Apply a scale to your model that approximates each road to be 5-6 feet long. Note: Pennsylvania Ave. is parallel to Constitution Ave.**

**2. Place each card that contains the name of a famous national monument at the indicated intersection.**

**3. Study the scale map created by your team. Compare your scale map to the map below.**

FBI Building

**Pennsylvania Ave**.

National

Zoo

White

House

Ford’s

Theater

Vietnam War

Memorial

Lincoln

Memorial

**Constitution Ave**.

Washington

Monument

US Capitol

Smithsonian

Institute

Supreme

Court

**14th Street NW**

US Treasury

Developed by Dan Mulligan, 2011

A lesson:

Angles formed by a b

c d

Parallel Lines and an e f

g h

Intersecting Line

Essential Understandings from the Math Curriculum Framework:

1. Parallel lines cut by a transversal form angles with specific relationships.

2. Relationships between pairs of angles formed by two parallel lines and a transversal:

* **Vertical Angles** - Angles located opposite each other. (<a & <d; <b & <c; <e & <h; and <f & <g)
* **Corresponding Angles** - Located on the same side of transversal and same position on each parallel line.
  + - (<a & <e; <c & <g; <b & <f; and <d & <h)
* **Alternate Interior Angles** - Located between two parallel lines and opposite sides of Transversal
  + - (<c & <f; and <d & <e)
* **Same-side Interior Angles** - Located between two parallel lines and same side of transversal
  + - (<c & <e; and <d & <f)

**Activity 1: Where am I?**

* + **Your tour begins at the FBI Building.**
  + **Travel to the national monument located at the CORRESPONDING ANGLE**

**from the FBI Building.**

* + **Now travel to the national monument located at the VERTICAL ANGLE**

**position from your current location.**

* + **Next travel to the CORRESPONDING ANGLE position from your current location.**
  + **Where are you?**

**Activity 2: Where am I?**

* **Your tour begins at the US Treasury.**
* **Travel to the national monument located at the CORRESPONDING ANGLE from the US Treasury.**
* **Now travel to the national monument located at the ALTERNATE INTERIOR ANGLE position from your current location.**
* **Next travel to the VERTICAL ANGLE position from your current location.**
* **Where are you?**

**Touring DC by the Angles**

**Activity 3: Recording Sheet**

**Try to use as many different types of angles as possible in the creation of your tour. Ensure that each person on your team understands how your choice of angle-type will affect the tour direction.**

1. **Starting Location:**
2. **Travel to Stop 1 by:**
3. **Travel to Stop 2 by:**
4. **Travel to Stop 3 (Final Stop) by:**