CONCEPT MAP OF UNIT		TOPIC	Intersection Design
Safe Routes To Schools Resources		TEACHER	NS Supplement
		GRADE	9-12

KEY LEARNING(S)	UNIT ESSENTIAL QUESTIONS	OPTIONAL INSTRUCTIONAL TOOLS
Design and effectiveness of intersections	What infrastructure improvements could be made to intersections in your neighborhood?	SRTS materials

CONCEPT #1	CONCEPT #2	CONCEPT #3	CONCEPT #4
Intersection Design	Infrastructure	Mapping	Engineering
LESSON ESSENTIAL QUESTIONS #1	**LESSON ESSENTIAL QUESTIONS #2**	**LESSON ESSENTIAL QUESTIONS #3**	**LESSON ESSENTIAL QUESTIONS #4**
What are the important design elements of an intersection?	What infrastructure supports the highest level of biker/pedestrian safety?	How do you utilize a mapping program?	What design elements would you include?
VOCABULARY #1	**VOCABULARY #2**	**VOCABULARY #3**	**VOCABULARY #4**
intersection	Components	Infrastructure	landmarks

ADDITIONAL INFORMATION

Youtube video: https://www.youtube.com/watch?v=Hjq-9EySClU&feature=youtu.be

LESSON:

Day 1 – Watch the video. Write or illustrate your answer to Lesson Essential Question #1: What are the important design elements of an intersection?

Day 2 – Watch the video. Write or illustrate your answer to Lesson Essential Question #2: What infrastructure supports the highest level of biker/pedestrian safety?

Day 3 – Watch the video. Write or illustrate your answer to Lesson Essential Question #3: How do you utilize a mapping program?

Day 4 – Watch the video. Write or illustrate your answer to Lesson Essential Question #4: What design elements would you include?

Slide 1

STREETS IN YOUR NEIGHBORHOOD

Intersections

Slide 2

Video

Watch the anatomy of an intersection video using this link

For the assignment take note of the following while watching the video:
- Types of an intersection
- Components of a street
- Types of signs existing

Slide 3

Assignment

After watching the anatomy of an intersection video; walk, bike, scoot, or skateboard around your neighborhood and identify the location of:

- 3 types of intersections
- signage and location of signage

Slide 4

Analysis

1. How did you move around your neighborhood to complete the assignment?
2. What street components did you see?
3. What types of intersections are most common in your neighborhood?
4. What type of signage did you see in your neighborhood?
5. What components of the street made it easy for you to navigate your neighborhood?
6. What were some challenges did you face while navigating your neighborhood?

Slide 5

STREETS IN YOUR NEIGHBOORHOOD

Choosing a Route

Slide 6

The thing about routes

Choosing how we get to a destination depends on many factors:

- How long will it take us?
- Is the infrastructure that we need available (i.e. areas to walk that are visible and separated from fast moving traffic)?
- How comfortable do we feel on that route?
- Direct vs. scenic routes

Slide 7

Assignment

Using Google maps, identify landmarks around your neighborhood (i.e. corner store, an interesting building, a park, etc.)

Using the direction function from your house to the landmark, see how fast does it take you to Walk, roll, or run.

Slide 8

Analysis

1. How did you get to your chosen destination?
2. Did you use the route that google sent you, or did you choose a route that you are familiar with?
   a. What made you choose the route (i.e. familiarity with route, personal safety concerns, infrastructure)
3. How long did it take you to get to the destination in comparison to what google calculated?

ADDITIONAL INFORMATION