Course, Unit Date(s): 7/11

Lesson No.:	Lesson Title: a group investigation	Periods:

Overall Expectations:	Specific Expectations:
investigate a math concept	

Learning Activities:

APPLICATIONS OF TRIGONOMETRY

Break students into groups

Each group needs to discovery a field of work that involves the use of trigonometry
ex. pythagorean theorem, trigonometric functions, the law of Sines
Assign different roles to students
(researcher, graphic designer, presenter…)

Prepare a presentation about the career and the mathematics that they use

Demonstrate the mathematics involved with the career

Famous individuals that contributed to this field and what they did.

Check for understanding by providing insight, help and resources for students to use

Guided practice will be through presentation of math used

independent practice will be through group and individual research

answer questions from class and teacher

Materials
computer, whiteboard, research tools…

Notes:

EL adaptation

careful grouping, give students careful instructions, provide translation if needed, including specific vocabulary that is needed, confortable presentation environment

SN adaptation

careful grouping, provide instruction and details before, provide support during presentation

Evaluations:
Diagnostic:
ask students where they would use trig

Formative:
go around classroom and watch development of group ideas and provide support

Summative:
Graded off of group work, content, and presentation skills

Multiple Intelligences
- ○ Verbal/Linguistic
- ○ Logical/Mathematical
- ○ Musical
- ○ Visual/Spatial
- ○ Bodily/Kinaesthetic
- ○ Interpersonal
- ○ Intrapersonal
- ○ Naturalistic
- ○ Spiritual

Bloom's Taxonomy
- ○ Knowledge
- ○ Comprehension
- ○ Application
- ○ Analysis
- ○ Evaluation
- ○ Synthesis

Reading Strategies
- ○ Predicting/Revising
- ○ Visualizing
- ○ Connecting text-text
- ○ Connecting text-self
- ○ Spatial patterning
- ○ Inferencing
- ○ Critical questioning

Media/Multi-Literacy
- ○ Authorship (Constructed)
- ○ Format (Technique)
- ○ Audience
- ○ Content (Values)
- ○ Purpose

Design Grammars
- ○ Linguistic
- ○ Visual
- ○ Audio
- ○ Gesture
- ○ Image
- ○ Spatial
- ○ Multi-modal

A&E Strategies
- ○ Diagnostic
- ○ Formative
- ○ Summative
- ○ Peer/Self Assessment
- ○ Checklist/Checkbrick
- ○ Log/Journal
- ○ Group Presentations
- ○ Oral questioning
- ○ Conferencing
- ○ Other:

Cross-Curricular
- ○ Differentiated Instruction
- ○ Emotional Intelligence
- ○ Metacognition
- ✓ Literacy
- ○ Numeracy
- ○ Problem-solving
- ○ Pathways/Careers

Board Topics
- ○ Character Education
- ○ Equity
- ○ Diversity
- ○ Environmentalism
- ○ Anti-homophobia
- ○ Bullying Prevention

Resources:

Homework: Reflect on using trig and math in your profession, does it change you idea of math?