

Brief Summary of Unit: **INTRO to BUSINESS**

This unit discusses the importance of effective company representation through business cards, signs, etc.

Subject: **Business**

Grade: **7th**

Stage 1: Desired Results

Delaware Content Standards:

Standard 1: Utilize career resources to develop a career information database that includes international career opportunities.

Standard 2: Integrate all forms of communication in the successful pursuit of employment.

Standard 3: Recognize that entrepreneurs possess unique characteristics and evaluate the degree to which one possesses those characteristics.

Standard 4 Use the financial competencies needed by an entrepreneur.

Standard 5: Recognize that entrepreneurs must establish, maintain, and analyze appropriate records to make business decisions.

Big Ideas:

- Observe best practices for starting a business
- Construct a marketing product for their mock business
- Conduct research on various aspects of a business.

Students will be able to:

- a) student will examine career requirements, job responsibility, employment trends, and opportunities for careers in business.
- b) Discuss characteristics and opportunities that lead to the development of a successful career in entrepreneurship management, marketing, and banking and finance.
- c) Create a logo, slogan, letterhead, and business card for an imaginary business.

Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)

Suggested Performance Task(s):

The students use the Student Self-Assessment Rubric for Business Cards to check their work before submitting for a grade.

Comprehensive Assessment Program:

- Individual project
- Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
- Dialogue and Discussion
- Constructed Responses- Application of skills to real-life situations/scenarios

Other Evidence:

Student Self-Assessment and Reflection:

The students use the Student Self-Assessment Rubric for Business Cards to check their work before submitting for a grade.

Stage 3: Learning Plan
(Design Learning Activities To align with Goals and Assessments)

Key learning events needed to achieve unit goals:

Essential Questions:

- What career requirements, job responsibilities, employment trends, and opportunities exist for careers in business?
- What is a logo?
- What is a slogan?
- How do I design and create a business card? a letterhead?

Vocabulary:

Business Card – a small card with a person’s name, business affiliation, and contact information

Entrepreneur – a person who has an idea and turns it into a business; a business owner who assumes the risk for a business venture.

Letterhead – a sheet of stationery printed with the business name and address at the top

Logo – a name, symbol, or trademark designed for easy recognition; an iconic representation of a business

Slogan – a catch phrase used to represent a business or product; a motto

A logo and slogan should be designed so that they represent your business in an individualized way. When people see the logo or hear the slogan, they should automatically think of your business. Even small businesses spend thousands of dollars every year in advertising. The logo and slogan are two of the most valuable advertising tools a business has.

A business card and letterhead are representative of the business and therefore should present a professional appearance. The business card contains all of the information needed for customers or potential customers to contact you. It is extremely important that your business maintains a professional appearance, and the business card and letterhead are your representatives when you aren’t there.

LESSON 1: SUCESSFUL ENTREPRENEURS

- Identify some successful entrepreneurs. (Bill Gates, Steve Jobs, Donald Trump, etc) Discuss the characteristics of successful business people.
- Given a list of potential business careers (Potential Business Careers Activity worksheet), each student will select one and research the career requirements, job responsibilities, employment trends and opportunities using the Occupational Outlook Handbook <http://bls.gov.OCO> . The students will create a flyer about their researched career.

LESSON 2: LOGOS AND SLOGANS

- PowerPoint presentation Logos and Slogans. Ask the name of the company that has that logo. Then ask the students what that company slogan is. (Ex. Graphic of the “Golden Arches”, McDonald’s, “I’m loving it.”)

- Show and discuss the Logo and Slogan Creation presentation. Students will create a business name for an imaginary business related to a career in which they are interested.
- Demonstrate how to create a logo using drawing tools. Students create a logo and slogan for their imaginary business.
- www.sloganizer.net (This site will create a slogan for you using keywords from your business and basic slogans. Some are entertaining. Many do not make any sense. Great way to show that creating a slogan does require thought; there's no simple "one slogan fits all".)
- After creating their logos and slogans, the students use peer editing to get feedback and make any changes if necessary.

LESSON 3: BUSINESS CARDS

- Provide examples of business cards from area businesses. Discuss which ones capture the most attention and why. (May use the Sample Business Cards file.)
- Show and discuss the Creating a Business Card presentation. Discuss what should be included on a business card.
- Demonstrate how to create a business card. (You may use templates or show how to create a card from scratch.) Students create a business card for their imaginary business. Students utilize the Student Self-Assessment Rubric for business cards to check their work before being submitted for a grade.
- Incorporating Mathematics: Students complete Scaling worksheet.

LESSON 4: LETTERHEADS

- Provide examples of letterheads from area businesses. Discuss what should be included on a letterhead.
- Demonstrate how to create a letterhead. Students create a letterhead for their imaginary business.
- Discuss the expense of business cards and letterhead stationery if purchased from a vendor or printed in-house. Students complete the Business Cards & Letterhead Stationery worksheet.

Resources & Teaching Tips

- Slide Show Software
- Desktop Publishing
- Websites:

www.sloganizer.net

<http://www.bls.gov/OCO>

Accommodations / Differentiation Ideas and Tips

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided appropriately. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education

instructor will be beneficial in providing appropriate differentiation. Many students (both with and without disabilities) who struggle with reading may benefit from the use of text reading software or other technological aids to provide access to printed materials. Many of these are available at little or no cost on the internet.

Brief Summary of Unit: **Rubber Band Racers**

The focus of this lesson is on rubber band powered car design. Teams of students construct rubber band powered cars from everyday materials. Students must design their cars to travel a distance of at least 3 meters within a 1 meter wide track.

Subject: **Engineering**

Grade: **7th grade**

Stage 1: Desired Results

Delaware Content Standards

Next Generation Science Standards Grades 6-8 (Ages 11-14) Energy

Students who demonstrate understanding can:

- **MS-PS3-5.** Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.

Engineering Design

Students who demonstrate understanding can:

- **MS-ETS1-1** Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- **MS-ETS1-2** Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem

Measure and estimate lengths in standard units.

- **CCSS.Math.Content.2.MD.A.1** Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- **CCSS.Math.Content.2.MD.A.3** Estimate lengths using units of inches, feet, centimeters, and meters.

Represent and analyze quantitative relationships between dependent and independent variables.

- **CCSS.Math.Content.6.EE.C.9** Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.

Technology and Society

- **Standard 5:** Students will develop an understanding of the effects of technology on the environment.
- **Standard 7:** Students will develop an understanding of the influence of technology on history.

Big Ideas

Students will be able to:

- Designed and constructed a rubber band car
- Measured distance and calculated speed
- Tested and refined their designs
- Communicated their design process and results

**Stage 2: Assessment Evidence
(Design Assessments To Guide Instruction)**

Suggested Performance Task(s)

- *Design and construct a rubber band car*
- *Measure distance and calculate speed*
- *Test and refine their designs*
- *Communicate their design process and results*

Comprehensive Assessment Program

- Team Evaluation and Reflection
- Self Evaluation and Reflection
- Writing Prompt
- Final Project
- Self/Team Rubric

Other Evidence

Student Self-Assessment and Reflection

Write a paragraph or essay explaining what automotive engineers must take into consideration when designing safe vehicles today.

**Stage 3: Learning Plan
(Design Learning Activities To align with Goals and Assessments)**

Key learning events needed to achieve unit goals

Key Terms

Science concepts that will be helpful to keep in mind when designing and testing your rubber band car.

- **Energy**

- **Newton's Laws of Motion**

Sir Isaac Newton (1642 – 1727) was a brilliant mathematician, astronomer and physicist.

✚ *Newton's First Law* – An object at rest will remain at rest and an object in motion will remain in motion at a constant speed unless acted on by an unbalanced force (such as friction or gravity). This is also known as the law of inertia.

✚ *Newton's Second Law* – An object's acceleration is directly proportional to the net force acting on it and inversely proportional to its mass. The direction of the acceleration is in the direction of the applied net force. Newton's Second Law can be expressed as: $F = ma$

✚ *Newton's Third Law* – For every action there is an equal and opposite reaction.

Procedure

1. Show students the various Student Reference Sheets. These may be read in class, or provided as reading material for the prior night's homework.
2. Divide students into groups of 3-4 students, providing a set of materials per group.
3. Explain that students must develop a car powered by rubber bands from everyday items, and that the rubber band car must be able to travel a distance of at least 3 meters within a 1 meter wide track. Rubber bands cannot be used to slingshot the cars. The car that can travel within the track for the greatest distance is the winner.
4. Students meet and develop a plan for their rubber band car. They agree on materials they will need, write or draw their plan, and then present their plan to the class.
5. Student teams may trade unlimited materials with other teams to develop their ideal parts list.
6. Student groups next execute their plans. They may need to rethink their plan, request other materials, trade with other teams, or start over.
7. Next....teams will test their rubber band car. Students can create the 1 meter wide "track" using masking tape on the floor.
8. Teams then complete an evaluation/reflection worksheet, and present their findings to the class.

Planning Stage

- Meet as a team and discuss the problem you need to solve. Then develop and agree on a design for your rubber band car. You'll need to determine what materials you want to use.
- Draw your design in the box below, and be sure to indicate the description and number of parts you plan to use. Present your design to the class.
- You may choose to revise your teams' plan after you receive feedback from class.

Construction Phase

Build your rubber band car. During construction you may decide you need additional materials or that your design needs to change. This is ok – just make a new sketch and revise your materials list.

Testing Phase

Each team will test their rubber band car. Your rubber band car must travel 3 meters within a 1 meter wide track. Calculate your car's speed (distance traveled per unit of time; $S = d/t$). Be sure to watch the tests of the other teams and observe how their different designs worked.

Evaluation Phase

Evaluate your teams' results, complete the evaluation worksheet, and present your findings to the class.

Resources & Teaching Tips**Reading**

- The New Way Things Work (ISBN: 978-0395938478)
- Masters of Car Design (ISBN: 978-8854403376)

Supplies

- 16 in. x 16 in. piece of corrugated cardboard (or a cereal box/smaller piece of

cardboard) 4: CDs

- paper plates or plastic coffee, yogurt, or takeout lids)
- 4 rubber bands

- 3 unsharpened pencils
- 4 metal paperclips
- package thumb tack
- scissors
- masking tape
- meterstick
- stopwatch

Internet Connections

- International Federation of Automotive Engineering Societies: What do Automotive Engineers Do? (www.fisita.com/jobs/careers/do)
- TryEngineering (www.tryengineering.org)
- ITEA Standards for Technological Literacy: Content for the Study of Technology (www.iteaconnect.org/TAA)
- National Science Education Standards (www.nsta.org/publications/nses.aspx)

Accommodations / Differentiation Ideas and Tips

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Brief Summary of Unit: **Physical Fitness**

Students will learn their level of fitness and a variety of exercises, which they can use for development of primary physical fitness skills, if performed with appropriate frequency and intensity.

Subject: ***P.E/Health***

Grade: ***6th***

Stage 1: Desired Results

Delaware Content Standards

Health-Related Fitness

- **6.HF.3** Understand the importance of achieving and maintaining a health-enhancing level of physical fitness.
- **6.HF.3.1** Apply strategies that result in the achievement of gender- and age-related standards on approved fitness assessments. **6.HF.3.2** Use a variety...

Motor Skills Development

- **6.MS.1** Apply competent motor skills and movement patterns needed to perform a variety of physical activities.
- **6.MS.1.1** Use some specialized skills that are refined and appropriate for modified game play.
- **6.MS.1.2** Integrate locomotor and manipulative skills...

Big Ideas

Students will be able to:

- learn their level of fitness and a variety of exercises, which they can use for development of primary physical fitness skills, if performed with appropriate frequency and intensity.

Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)

Suggested Performance Task(s)

Comprehensive Assessment Program

- Teacher enters test scores to computer in order to compile fitness information on each student, print individual reports, awards if possible, make analyses of fitness level of student population and adjust class instructions to target the weak areas.
- Teacher sends [information letter](#) to parents, [summary of students fitness scores](#), and homework worksheets ([upper body example](#)) for students scoring below 50th percentile in particular skill.
- After each class, while leaving the gym, students assess their performance by giving themselves either high five (green hand), medium five (yellow hand) or low five (red hand) located on the wall at the door. See [Designing your gym class](#) for more information

Other Evidence

Student Self-Assessment and Reflection

Stage 3: Learning Plan

(Design Learning Activities To align with Goals and Assessments)

Key learning events needed to achieve unit goals

Lesson 1

The lesson objectives are to teach class format and procedures for fitness unit, activities on station, and recording procedure.

Introductory segment

(5 minutes)

1. The students enter the gym and immediately start movement around the gym on the basketball line with the tunes of warm-up music. Routine includes alternating walking with more intensive movement and practicing space awareness by attempting to keep constant spacing from other students while they walk, jog, walk, skip, walk, slide, walk. (3 minutes)
2. Students sit down on their assigned numbers for lesson introduction (5 students in each line facing the information board. This allows for quick check of attendance. The new lesson is introduced. Teacher points out the components of physical fitness on a poster and briefly explains each of them. (2 minutes)

Main segment

(30 minutes)

1. Introduce activities on fitness circuit.

- *Station 1.* Push-ups: teacher explains and demonstrates correct body position. Students record number of push ups performed on line 1 of the fitness card.
All students perform couple of push-ups. Teacher points out incorrect body positions and suggests ways of correcting them.
- *Station 2.* Wall sit: sit on imaginary chair with knees bent in a right angle and back supported by the wall. Students record “V” (check) on line 2 of their fitness card, if they managed to hold sitting position for the whole station time. All students learn proper wall sit. Teacher corrects inappropriate body positions.
- *Station 3.* Superman: lift arms and legs while laying on stomach. Students record “V” (check) on line 3 of their fitness card, if they managed to hold “Superman” for the whole station time. All students perform Superman. Teacher stresses lifting straight legs, arms and chest off the floor.
- *Station 4.* Broad jump: students record distance of their furthest jump from a starting line to their heels on line 4 of their fitness card. All students perform several broad jumps from stationary position with both feet together. Teacher emphasizes jump from stationary position (Students will run for jump take off to increase jumping distance) and precise starting point to determine correct jumping distance.
- *Station 5.* Sit and reach: students take turns at the sit and reach box. Students record their stretch on line 5 of their fitness card. Teacher demonstrates and explains sit and reach according to The President’ Challenge procedure. All students sit in pike position, reach as far as they can with extended arms, hands beside each other, and hold for 3 seconds.
- *Station 6.* Arm wrestling: students put “V” (check) on line 6. Teacher explains and demonstrates the game. Students lie down on stomach in front of partner and wrestle on teacher signal.
- *Station 7.* Jump off the trampoline: students record number of jumps during the station time on line 7 of their fitness card. Students run, hurdle on the trampoline, and land on the mat.
- *Station 8.* Pole climbing: students record how many times they touched the top of a pole on line 8 of their fitness card. Teacher explains use of arms and legs for climbing a pole.
- *Station 9.* Running high jump: (like a jump shot) students record how many times they touched the board or balloon on line 9. Teacher demonstrates jump with a touch to the basketball board (I don’t jump so high, I just lowered my board). Balloon tied to the board can be used too.
- *Station 10.* Leg lifts: students record how many times they lift their knees to chest on line 10 of their fitness card. Teacher demonstrates straight arm hang on the wall bar and lifts of bent legs toward chest.
- *Station 11.* Pull-ups/chin-ups on a free-standing chin up bar: Students record number of pull ups on line 11 of their fitness card. Teacher demonstrates full hang and pull up or uses student for demonstration.
- *Station 12.* Shuttle run: students record how many times they touched tape on line 12 of their fitness card. Teacher demonstrates running and touching tapes on the floor spaced 30 feet apart. Students try a couple of times.
- *Station 13.* Curl-ups: students record how many sit-ups they did on line 13 of

their fitness card.

Teacher demonstrates starting sit-up position, chest lift, and touching a balloon.

- *Station 14.* Medicine ball lift: students record how many times they lift a medicine ball on line 14 of their fitness card. Teacher demonstrates the procedure for ball lifts — legs bent apart, stomach pulled in, and arms straight.
2. Overview of the recording method. Teacher passes fitness record sheets and pencils (ask PE managers to do it or have sheets spread out on the side beforehand). Students sit down on assigned numbers. Teacher explains the record sheet and the way students need to record their work. The table on one side is designated for their daily work, the second side is for the teacher to record student's test scores. Student writes his/her first and last names, teacher's name, and date of birth.
 3. Selecting a partner and assigning a starting station. Students pair up, choose their starting station and sit down under the station sign, which is attached to the wall in station area. They circle the number of their starting station on the fitness record sheet. (This is important for smooth beginning of each following lesson, since some students don't remember their station even on 6th week).
 4. Station activities. If there is time left (not much will be left, if at all), the students can start activities for 30 seconds on each station. Stop after each station and review how and where to record station work.

Closing segment

(5 minutes)

The students sit down for class closing procedure again on their assigned number, Ask PE Managers to collect papers and pencils.

1. Stretch while cooling down in pike position.
2. Discuss personal fitness activities and assessment. Teacher talks about comparing personal scores to the Norms of 50th (health) and 85th (athletic) percentiles for each tested skill and age category. Teacher encourages students to think about personal goals, if they wish to be athletes and their scores are not sufficient for high school and university competitive sports participation.
3. Homework assignment: find a way to modify class fitness activities and do them after school at least every other day.
4. Pick up belongings (jackets, nametags, etc.).
5. Self-assessment on the High Five board located at the exit door. (See article, ["Designing your gym class"](#) for description.)
6. PE Super Star slip pick-up. (See article, ["Designing your gym class"](#) for description.)

Lesson 2

The lesson objectives are to evaluate abdominal strength and endurance with a sit-up test and a fitness workout.

Introductory segment

See lesson 1

Main segment

1. Curl-up test
 - Teacher demonstrates curl-up according to The President's Challenge fitness procedure.
 - Students practice range of motion of curl-ups and technique of a skill.
 - Students pair up with their fitness partner and practice a few curl-ups with partners.
 - Students pick-up their fitness cards and pencils.
 - Partners take a place on the mats, which were set up for fitness circuit and get ready for test. Students take turns and start curl-ups after teacher's signal. Both partners count numbers of curl-ups silently. After one minute performer's score is recorded on the teacher side of a fitness card on the curl-ups line.
2. Fitness circuit: Equipment arrangement is the same as in Lesson 1. Teacher plays up-beat music for thirty seconds for each station. This is the first time the students will go through the full fitness circuit and actually record their scores on their fitness cards, so after each station teacher briefly reviews recording method and asks for students' questions and comments. Rotations will take much longer in this lesson, but it will pay off in following classes. Students rotate to the next station in the same direction as in their warm-up in the Introductory segment. Station numbers are ascending in that direction.
3. Game: If there is time left (depending on the students cognitive and physical level and the teacher's demonstration and explaining methods), the students play Hinson's inclusive version of a "Partner Duck, Duck, Goose." I played this game with some classes, and didn't have time to play with others. I use this game for fun, but also for reaction time, agility, and speed development.

Game description: Partners are standing at the middle line of a basketball court. They take turns in tapping partner's shoulder and saying "duck." After the second round of taps one of them can say "goose." "Goose" needs to chase partner who is trying to run to the safety line (end of the court) without being tagged.

Closing segment

(5 minutes)

Basically the same as in Lesson 1, except teacher reviews curl-ups and points out 50th and 85 percentile on a fitness chart.

Lesson 3

The lesson objectives are to assess lower back and legs flexibility through the sit and

reach test and fitness stations.

Introductory segment

Same as Lesson 1. Lesson introduction to sit and reach assessment and fitness circuit. Teacher briefly talks about importance of flexibility (range of motion in joints) for correct body posture and body positions for all sport skills and health.

Main segment

1. Fitness Circuit. Students pick up their fitness cards and pencils, report to their starting station and start after the signal. Equipment arrangement and assignments are very similar to Lesson 2, so students are familiar with activities, but minor changes in assignment keep students interested. Teacher plays up-beat music for thirty seconds for each station and stops to signal rotation. Rotation and recording should not take more than fifteen seconds by now, so teacher stops music every forty-five seconds.
 - On Station 6 “Arms Wrestling,” the students have the choice to do arm wrestling or ball wrestling (try to pull a medicine ball or basketball away from partner while kneeling) with a partner.
 - On Station 7, the students jump from trampoline to trampoline and land on the mat.
 - Teacher is assessing sit and reach on Station 5.
2. Game. In Lesson 3 there will be more time left for a fitness game. Classes that didn't play Hinson's “Duck, Duck, Goose” can do so. The classes that already played this game play partner version of “Snatch the Bacon.”

Game description: Partners facing each other on the middle basketball line with a beanbag on the line. After a signal, students attempt to snatch the bean bag and run to their safety which is behind the ending line on their side of a gym. They are awarded with a point for getting to safety without being tagged by partner. If tagging partner touches person with a beanbag before the safety line, he/she is awarded a point. Students start the game from different positions — pike, criss-cross, with back to partner, lying on back, stomach. After 2 times they rotate to the next partner.

Partner rotation procedure: “Face your partner. Place bean bag on the line. Point to the student on the right side of you — turn to this person and look at his/her feet. If there is nobody on the right side of you — don't point and don't turn — say name of the person in front of you and look at his/her feet. Everyone slide to the spot of the feet you are looking at. Turn to your new partner. Assume starting position which is ...” This game is for fun, but mostly for reaction time, agility, and running speed.

Closing segment

(5 minutes)

Basically the same as in Lesson 2, but teacher reviews flexibility, sit and reach, and points out 50th and 85 percentile norms on a fitness chart.

Lesson 4

The lesson objectives are to assess upper body strength assessment through the pull-up test and fitness stations.

Introductory segment

Same as Lesson 1. Lesson introduction to upper body assessment and fitness circuit. Teacher briefly talks about importance of upper body strength for all sport skills, safety, and convenience.

Main segment

1. Fitness circuit. Students pick up their fitness cards and pencils, report to their starting station and start after the signal. Equipment arrangement and assignments are very similar as in previous lesson. Teacher plays up-beat music and stops it to signal rotation. Rotation and recording is much smoother by now, so teacher stops music at appropriate time.
 - The students jump from trampoline to trampoline, over a top segment of a vaulting box, and land on the mat.
 - On Station 9, replace high jump with spinning in a spinning tub. This is great activity for trunk/abdominal strength, body awareness, and vestibular stimulation (brain).
 - Teacher is testing on station 11.
2. Game. In Lesson 4, there will probably be more time left for fitness games. Classes that didn't play Hinson's "Duck, Duck, Goose" and "Snatch the Bacon," can do so. The classes that already played these games, play other partner games: Rooster Fight (trying to touch partner's knees), Tug of War (trying to pull partner over the line), Line Wrestling (trying to knock partner off a line), and trying to pat partner's hand, while both partners are in push-up position. I like to switch partners frequently for appreciation of different people.

Closing segment

(5 minutes)

Basically the same as in Lesson 2, but teacher reviews upper body strength and points out 50th and 85 percentile norms on a fitness chart.

Lesson 5

The lesson objectives are to assess agility through the shuttle run test and fitness stations.

Introductory segment

Same as Lesson 1. Lesson introduction to agility assessment and fitness circuit. Teacher briefly talks about agility in sport performance.

Main segment

1. Shuttle run procedure practice. Students line up on a sideline of a court. Since equipment will be set up for fitness stations, limited space is available, so students pair up with their fitness partner and line up behind each other to take turns. Teacher places bean bags on the second sideline. Teacher demonstrates procedure according to The President's Challenge manual. Students practice several times.
2. Fitness circuit. Students pick up their fitness cards and pencils, report to their starting station and start after the signal. Equipment arrangement and assignments are very similar as in previous lesson. Teacher plays up-beat music and stops it to signal rotation. Rotation and recording is much smoother by now, so teacher stops music at appropriate time.
 - The students have a choice on Station 7. They can jump from the trampoline over one vaulting box segment, on the top of two segments, or over two segments. (Set up two sets: trampoline, mat with one segment, and trampoline, mat with 2 segments). Encourage progressing from easy to more difficult.
 - On Station 10, instead of leg lifts, students practice flexed arm hang — a test for muscular endurance.
 - Teacher is testing on station 12.
3. Game. In Lesson 5, there will be less time left, since teacher used time for shuttle run practice. Students play partner games learned in previous lessons.

Closing segment

(5 minutes)

Basically the same as in Lesson 2, but teacher reviews agility, shuttle run, and points out 50th and 85 percentile norms on a fitness chart.

Lesson 6

The lesson objectives are to assess muscular endurance through the flexed arm hang test and fitness stations.

Introductory segment

There is a major change in this lesson. Students enter the gym, immediately sit down on their assigned number, listen for lesson introduction about muscular endurance and flexed arm hang assessment.

Main segment

1. Fitness circuit. Equipment arrangement and assignments are the same as in previous lesson. After the activity on stations, students rotate to the next station after one lap of slow jogging. Emphasize to students high intensity of movement on station and very slow jogging. Students do not record their scores on stations, since fitness circuit will take much longer, because students are jogging during each transition and time on the station could be extended by the time of the flexed arm hang test. Some kids can hold a minute or more. Teacher records test time in her notebook.
2. On Station 12, instead of shuttle run, the students play partner game. Game description: Each partner has a basket with 3 small balls. The objective of the game is to have fewer balls in own basket than an opponent has when the game ends. After the signal, each student takes one ball from own basket and drops it to the opponent's basket. Only one ball can be moved at the time.
3. Teacher is testing on Station 10.
4. In lesson 6, there will be less time left, but students should still have time to play Hinson's "True/False" game. Students line up at the middle line facing their partner. One line of students is "False," the opposite line is a "True" team. Teacher makes a statement (e.g. the solar system has twenty planets or $4 \times 5 = 20$). If it is a true statement, the "true" team flees, while the other team chases and vice versa. Points can be awarded to a whole team or individual players.

Closing segment

(5 minutes)

Basically the same as in Lesson 2, but teacher reviews muscular endurance, flexed arm hang, and points out 50th and 85 percentile norms on a fitness chart.

Lesson 7

The lesson objectives are to assess cardiovascular endurance by running/walking a one-mile distance.

Introductory segment

1. Teacher leads students to the track slowly jogging for warm-up. After light stretch, students are instructed how to take a one-mile run/walk test. Teacher uses monitoring, recording, and scoring method based on facility and own preference.
2. Suggestions:
 - Students receive one drinking straw for each completed lap. Instead of last straw, teacher records time in hand, nametag or masking tape on chest as students pass the finish line.
 - Students receive one dot on their palm with washable marker for each completed lap. Instead of last dot, teacher records time in hand, nametag or masking tape on chest as students pass the finish line.
 - The most accurate method of recording students' time. Students gets a partner. One partner takes test while second is recording time. The running students start from the starting line and complete appropriate amount of laps for a mile (5 laps on my track). The recording partners are sitting at the finish line. Teacher is calling time for each runner passing the line indicating completed lap on the track. Recording partners write time of each completed lap of his her partner on the time card. Teacher collects cards and students switch roles.
3. Students who finish their assessment first can play small group games such as Base Runner, Kickball for 3, etc. Most of the time, the students just walk around while recovering from the test.

Closing segment

Teacher reviews cardiovascular endurance, and points out 50th and 85 percentile norms on a fitness chart. Class walks back to the building

Resources & Teaching Tips

- tape player
- tape with prerecorded music for particular activities
- optional: physical fitness computer software such as Fitness Reporter
- 2 poles
- 6 tumbling mats
- 4 segment vaulting box
- 2 trampolines
- 3 medicine balls
- incline mat
- sit and reach assessment box
- broad jump mat or measuring tape secured to the floor with a starting tape placed at "0" on the measuring tape
- free standing chin-up bar
- wall chin-up bar

- spinning tub
- physical fitness components poster for lesson introduction
- laminated flashcards with physical fitness components on a whistle ring
- station signs labelled with numbers and a sketch or photo of the activity
- 2 chairs with tied balloons for sit up station

Accommodations / Differentiation Ideas and Tips

Adaptation during the warm-up for the students with limited mobility: students perform warm-up at their pace on the inside circle, station assignments need to be modified based on need of particular student.

Brief Summary of Unit: **Lección Preliminar**

This unit focuses on vocabulary relating to leisure activities such as dancing, watching television, listening to music, skateboarding, playing video games, reading magazines, etc. In addition to learning new vocabulary, the verb “Gustar” and similar verbs like “Gustar” will be introduced to the students for the first time. During the course of this unit plan, students will be exposed to a native speaker from Colombia talking about his likes and dislikes relating to music and dancing, listening to other native speakers talk about their likes and dislikes by watching a video, and interviewing their peers to discuss their own likes and dislikes.

Subject: ***Foreign Language (Spanish)***

Grade: ***7th***

Stage 1: Desired Results

Delaware Content Standards

- a. **Standard 1.1:** Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- b. **Standard 1.2:** Students understand and interpret spoken and written Spanish on a variety of topics.
- c. **Standard 1.3:** Students present information, concepts, and ideas in Spanish to an audience of listeners or readers on a variety of topics.
- d. **Standard 2.1:** Students demonstrate an understanding of the relationship between the practices and perspectives of Hispanic cultures.
- e. **Standard 4.2:** Students demonstrate understanding of the concepts of culture through comparisons between Hispanic cultures and their own.

Big Ideas:

- Language connects different cultures
- Communication is a universal need
- A culture demonstrates the beliefs and values of its people

Students will be able to:

- **Locate countries that speak Spanish on the world map**
- **Discuss various products and geographical features**
- **Introduce themselves and others in Spanish**
- **distinguish between formal and informal greetings**
- **identify the various family members**
- **Recognize the uses and ways to conjugate the verb Gustar and similar verbs**
- **Ask and answer questions about their likes and dislikes**
- **Identify and respond to questions regarding the "Favorite pastime" vocabulary words**
- **Read and write about the activities they would like and dislike to do from the two travel brochures given to them by the teacher.**

Stage 2: Assessment Evidence
(Design Assessments To Guide Instruction)

Suggested Performance Task(s)

- Interview between the teacher and the students
- Role play of talking to a friend about their favorite activities to do on the weekend
- Oral presentations
- Projects

Comprehensive Assessment Program

- Quizzes on the vocabulary
- Video questions checking for comprehension
- Warm-up activities
- Exploratory activities
- Class discussions
- Student participation

Other Evidence

Work on @HomeTutor in the classroom or at home, peer tutoring or increased time with the instructor during CT time or before/after school, visit www.conjuguemos.com

or www.classzone.com for additional assistance, extra activities

Student Self-Assessment and Reflection

Stage 3: Learning Plan
(Design Learning Activities To align with Goals and Assessments)

Key learning events needed to achieve unit goals

Essential Question:

- ***How do language and communication differ?***
- ***How does the geography of a country shape its culture?***
- ***What does culture mean?***

Significant task 1

Students will work individually or in pairs to create a technology-based presentation using power point, prezi or animoto on a Spanish speaking country of their choice. In their presentation they will describe the geography, products, and practices of that country including weather, seasons, food and other products, clothing and sports.

This task directly targets the following standards: **1.3** and **4.2**

Timeline: 3-4 blocks

Key vocabulary: Spanish speaking countries and capitals, geography terms (mountains, rivers, coast, lakes) weather, seasons, sports, food, and clothing

Resources: Avancemos textbook Unit 1.1 and ancillary materials, dictionaries, computers and Smartboard, and library media resource center

Significant task 2: *Speed Dating or ¿Quién eres?*

After creating a questionnaire, students will participate in a whole-class activity of “speed dating” as they move from person to person introducing themselves, listening to their partner and writing their information in Spanish. Students will create and present a “Wordle” word cloud about one class member.

This task directly targets the following standards: **1.1**, **3.1**, **4.2**

Timeline: 2-3 blocks

Key vocabulary: : Introductions, numbers, calendar vocab (birthdays), Spanish speaking countries and capitals, geography terms (mountains, rivers, coast, lakes) weather, seasons, sports, food, and clothing

Resources: Avancemos textbook Unit 1.1 and ancillary materials, dictionaries, computers and Smartboard, Google maps, art supplies and poster board,

<http://www.wordle.net/>

Resources & Teaching Tips

- Textbook Lessons: *Avancemos* 1
- Manipulatives: Food items
- *Overhead projector with transparencies*
- *Videos*

- Computers
- CD player
- VCR
- Photos of people and places
- Magazines
- Construction paper
- Markers
- Glue
- Scissors

Video clips to help you review:

“Orale el alfabeto” video

<http://www.youtube.com/watch?v=CK8HBnUcbuQ>

“Buenos dias” video

<http://www.youtube.com/watch?v=6TULi3hiJbk>

School House Rock video: “Pronouns” Rufus Xavier Sasparilla

<http://www.youtube.com/watch?v=koZFca8AkT0>

Presentarse Listening Activity

http://www.youtube.com/watch?feature=player_embedded&v=g1rydD4UeCQ

Hace Calor (Sesame Street)

<http://www.youtube.com/watch?v=lrFxl91nrvE&feature=share>

Hace Frio (Sesame Street)

<http://www.youtube.com/watch?v=s7tC-z-BgJ4>

Accommodations / Differentiation Ideas and Tips

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided appropriately. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation. Many students (both with and without disabilities) who struggle with reading may benefit from the use of text reading software or other technological aids to provide access to printed materials. Many of these are available at little or no cost on the internet.

Brief Summary of Unit: **Microsoft Word**

Subject: **Technology**

Grade: **6th**

Stage 1: Desired Results

Delaware Content Standards

- C/T 6.1
- C/T 6.2
- C/T 6.3
- C/T 6.4
- C/T 6.5

Big Ideas

1. **How will Technology effect our everyday lives an how we live?**
2. **How does Technology stimulate your creativity and change the future of**

learning and
Students will be able to: <ul style="list-style-type: none"> • <i>Share and maintain documents</i> • <i>Apply different views to a document</i> • <i>Apply protection to a document</i> • <i>Manage document versions</i> • <i>Share documents</i> • <i>Save documents</i>
Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)
Suggested Performance Task(s)
Create a project that includes the following components of Microsoft such as: <i>Graphics, Clip Art, Various Fonts, Tables/Charts, Hyperlinks, Internet sources, etc</i>
Comprehensive Assessment Program <ul style="list-style-type: none"> • Classwork • Homework • Projects • Quizzes • Test • End-of-Unit Test
Other Evidence
Student Self-Assessment and Reflection
Self-assessment rubric
Stage 3: Learning Plan (Design Learning Activities To align with Goals and Assessments)
Key learning events needed to achieve unit goals
<u>Skills:</u>
<ul style="list-style-type: none"> ✚ Keyboarding ✚ Vocabulary ✚ Discovering proportional relationship ✚ Browse the Internet <ol style="list-style-type: none"> 1. Share and maintain documents: Apply different views to a document, Apply protection to a document, Manage document versions, Share documents, Save documents, and apply a template to a document. 2. Format Content: Apply font and paragraph attributes, navigate and search through a document, apply indentation and tab settings to paragraphs, apply spacing settings to text and paragraphs, create tables, manipulate tables in a document, apply bullets to a document. 3. Apply page layout and reusable content: Apply and manipulate page setup settings, apply themes, construct content in a document by using to Quick Part Tool, create and manipulate page backgrounds, and create and modify headers and

footers.

4. **Include Illustrations and Graphics in a document:** Insert and format pictures in a document, insert and format shapes, WordArt, and SmartArt, insert format ClipArt, and apply and manipulate text boxes.
5. **Proofread documents:** Validate content by using spelling and grammar checking options, configure AutoCorrect settings, and insert and modify comments in a document.
6. **Apply references and hyperlinks:** Apply a hyperlink, create endnotes and footnotes in a document, and create a table of contents in a document.
7. **Perform mail merge operations:** Setup mail merge and execute mail merge.

Resources & Teaching Tips

Computer
Internet
Websites

Accommodations / Differentiation Ideas and Tips

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided appropriately. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation. Many students (both with and without disabilities) who struggle with reading may benefit from the use of text reading software or other technological aids to provide access to printed materials. Many of these are available at little or no cost on the internet.

Brief Summary of Unit: Students study the purposes and elements of mythology. Students read Rick Riordan's *The Lightning Thief* with a focus on the archetypal hero's journey and close reading of the many mythical allusions. They also read complex informational texts about the elements of mythology.

As a whole class, students will closely read several complex Greek myths, and then work in small groups to build expertise on an additional myth. Students then develop their narrative writing skills as they create their own hero's journey narrative.

Subject: English/Language Arts

Grade: 6

Stage 1: Desired Results

Common Core Standards: English Language Arts

[CCSS.ELA-Literacy.RL.6.1](#)

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

[CCSS.ELA-Literacy.RL.6.2](#)

Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

[CCSS.ELA-Literacy.RL.6.3](#)

Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

[CCSS.ELA-Literacy.RI.6.1](#)

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

[CCSS.ELA-Literacy.W.6.2.a](#)

Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

[CCSS.ELA-Literacy.W.6.2.b](#)

Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.

[CCSS.ELA-Literacy.W.6.2.c](#)

Use appropriate transitions to clarify the relationships among ideas and concepts.

[CCSS.ELA-Literacy.W.6.2.d](#)

Use precise language and domain-specific vocabulary to inform about or explain the topic.

[CCSS.ELA-Literacy.W.6.2.e](#)

Establish and maintain a formal style.

[CCSS.ELA-Literacy.W.6.2.f](#)

Provide a concluding statement or section that follows from the information or explanation presented.

[CCSS.ELA-Literacy.W.6.3](#)

Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

[CCSS.ELA-Literacy.W.6.3.a](#)

Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.

[CCSS.ELA-Literacy.W.6.3.b](#)

Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.

[CCSS.ELA-Literacy.W.6.3.c](#)

Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.

[CCSS.ELA-Literacy.W.6.3.d](#)

Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.

[CCSS.ELA-Literacy.W.6.3.e](#)

Provide a conclusion that follows from the narrated experiences or events.

[CCSS.ELA-Literacy.W.6.4](#)

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)

[CCSS.ELA-Literacy.W.6.5](#)

With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 6 [here](#).)

[CCSS.ELA-Literacy.W.6.9](#)

Draw evidence from literary or informational texts to support analysis, reflection, and research.

[CCSS.ELA-Literacy.W.6.9.a](#)

Apply *grade 6 Reading standards* to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").

[CCSS.ELA-Literacy.W.6.9.b](#)

Apply *grade 6 Reading standards* to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").

[CCSS.ELA-Literacy.L.6.1](#)

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

[CCSS.ELA-Literacy.L.6.1.a](#)

Ensure that pronouns are in the proper case (subjective, objective, possessive).

[CCSS.ELA-Literacy.L.6.1.b](#)

Use intensive pronouns (e.g., *myself*, *ourselves*).

[CCSS.ELA-Literacy.L.6.1.c](#)

Recognize and correct inappropriate shifts in pronoun number and person.*

[CCSS.ELA-Literacy.L.6.1.d](#)

Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*

[CCSS.ELA-Literacy.L.6.1.e](#)

Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*

Big Ideas

What is the hero's journey?

- **How does knowledge of the hero's journey help to more deeply understand character?**
- *The hero's journey is an archetypal storyline used over the course of centuries.*
- *The hero's journey helps us to better understand characters in literature and their response to challenges.*

Students will be able to:

- Cite text-based evidence to support an analysis of literary text. (RL.6.1)
- Engage in discussions with diverse partners about sixth-grade topics, texts, and issues. (SL.6.1)
- Support an analysis of literary text. (RL.6.1)
- Use a variety of strategies to determine the meaning of unknown words and phrases. (L.6.4)

- Express ideas clearly during discussions. (SL.6.1)
- Analyze how an author develops a narrator or speaker’s point of view. (RL.6.6)
- Describe how the characters change throughout a literary text. (RL.6.3)
- Cite text-based evidence to support an analysis of informational text. (RI.6.1)
- Determine the main idea of an informational text based on details in the text. (RI.6.2)
- Use a variety of strategies to determine word meaning in informational texts. (RI.6.4)
- Prepare oneself to participate in discussions. (SL.6.1)
- Use evidence from a variety of grade appropriate texts to support analysis, reflection, and research. (W.6.9)
- Write informative/explanatory texts that convey ideas and concepts using relevant information that is carefully selected and organized. (W.6.2)

**Stage 2: Assessment Evidence
(Design Assessments To Guide Instruction)**

Suggested Performance Task(s)
My Hero’s Journey Narrative:
scaffolded narrative

Comprehensive Assessment Program

Mid-Unit Assessment: Inferring about the Main Character in *The Lightning Thief*

This assessment centers on standards NYSP12 ELA CCLS RL.6.1 and RL.6.3. Students will read an excerpt from Chapter 4 in *The Lightning Thief*. Through a graphic organizer and multiple short constructed responses, students will describe how Percy responds to a challenge he faces in this excerpt, and then what they, as readers, can infer about his strengths and weaknesses based on his response. This is a reading assessment, and is not intended to formally assess students’ writing. Most students will write their responses, in which case it may also be appropriate to assess W.6.9. However, if necessary, students may dictate their answers to an adult.

End of Unit Assessment: Drawing Evidence from Text: Written Analysis of How Percy’s Experiences Align with “The Hero’s Journey”

This assessment centers on standards NYS ELA CCLS RL.6.1, RL.6.3, R.I. 6.1, and W.6.9. How do Percy’s experiences in Chapter 8 align with the hero’s journey? After reading Chapter 8 of *The Lightning Thief*, students will complete a graphic organizer and write a short analytical response that answers the question and supports their position with evidence from the novel and from the informational text “The Hero’s Journey.”

Other Evidence:

- Entrance Tickets/Exit Tickets
- Quick Writes
- Annotated Texts
- Text Dependent Questions

Student Self-Assessment and Reflection

Exit Ticket: Reflecting on Learning Targets

Stage 3: Learning Plan
(Design Learning Activities To align with Goals and Assessments)

Key learning events needed to achieve unit goals

Lesson 1: Engaging the Reader: Close Reading of Part 1: “Shrouded in Myth”

Lesson 2: Building Background Knowledge: Close Reading Part 2 of “Shrouded in Myth”

Lesson 3: Meeting the Main Character: Launching *The Lightning Thief* (Chapter 1)

Lesson 4: Inferring about Character: Getting to Know Percy (Chapters 1 and 2)

Lesson 5: Inferring about Character: Close Reading of *The Lightning Thief* (Chapter 3)

Lesson 6: Vocabulary Strategies and Questions from the Text: Close Reading Part 2 of *The Lightning Thief* (Chapter 3, continued)

Lesson 7: Mid-Unit 1 Assessment: Making Inferences about Percy

Lesson 8: Things Close Readers Do (added to) The Hero’s Journey, Part 1: What Is a Hero?

Lesson 9: Building Background Knowledge about the Hero’s Journey, Part 2: Acts 2 and 3 Plus Focusing on Key Vocabulary in “The Hero’s Journey”

Lesson 10: Mid-Unit 1 Assessment: Making Inferences about Percy

Lesson 11: Selecting Evidence: “The Hero’s Journey” and *The Lightning Thief* (Chapter 6)

Lesson 12: Writing with Evidence: Percy and the Hero’s Journey (Chapter 7)

Resources & Teaching Tips

- **Binders or Journals:** Students will be receiving many recording forms, graphic organizers, and texts throughout this module. It is suggested that students have a binder in which to collect these materials and refer back to them. Alternately, teachers who prefer to use notebooks or journals can use the recording forms and graphic organizers as a template with which to model for students to create these structures independently.
- **Evidence Flags:** Students will be using evidence flags to mark parts of *The Lightning Thief* in which they did important thinking or found evidence to support a specific question. Evidence flags are strips of sticky notes (either purchased this way or full-sized sticky notes cut up). Students will need a baggie of these to keep at school and a baggie of these to keep at home.
- **Question Baskets:** Multiple lessons ask students to engage in question-based discussions. Questions are provided in supporting materials for the lesson they are needed; however, they must be cut into individual question strips, folded, and placed

in baskets or baggies from which students will pull them.

Central Texts:

- Rick Riordan, *The Lightning Thief* (New York: Hyperion Paperbacks for Children, 2005), ISBN: 0-7868-3865-3.
- Neidl, Jessica Fisher. "Shrouded In Myth." *Calliope* 13.1 (2002): 10.
- "The Hero's Journey," Adapted by Expeditionary Learning from www.mythologyteacher.com by Zachary Hamby

Accommodations / Differentiation Ideas and Tips

- Teacher can choose the way students will close read the text: partner or independent, based on the needs of students in the classroom.
- Consider coordinating with a Social Studies teacher to study in depth the ways in which myths both shaped and were shaped by wider Greek culture and beliefs. How did myths help to explain the way the world and humanity work? How did Greek mythology influence the beliefs of other cultures?
- With a visual arts teacher, students can create their own visual representations of important moments in Greek mythology that they have read.

Subject: Math

Topic: Ratios and Unit Rates

Brief Summary of Unit

Students begin their sixth grade year investigating the concepts of ratio and rate. They use multiple forms of ratio language and formalize understanding of equivalent ratios. Students apply reasoning when solving collections of ratio problems in real world contexts using various tools (tape diagrams, double number lines, ratio tables, equations and graphs). Students bridge their understanding of ratios to the value of a ratio, and then to rate and unit rate, discovering that a percent of a quantity is a rate per 100.

Delaware Content Standards

Standard 1: 6.RP.1 – Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

Standard 2: 6.RP.2 – Understand the concept of a unit rate a/b associated with a ratio $a:b$ with b not equal to 0, and use rate language in the context of a ratio relationship.

Standard 3: 6.RP.3 – Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Big Ideas

Students will know how to:

- Use the four operations with whole numbers to solve problems.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
- Convert like measurement units within a given measurement system.
- Graph points on the coordinate plane to solve real-world and mathematical problems.

Students will be able to:

- Use ratio tables and ratio reasoning to compute unit rates associated with ratios of fractions in the context of measured quantities.
- Students use unit rates to solve problems and analyze unit rates in the context of the problem.
- Understand that a ratio is an ordered pair of non-negative numbers, which are not both zero.

Stage 2: Assessment Evidence
(Design Assessments To Guide Instruction)

Suggested Performance Task(s)

- Write ratios in 3 ways.
- Construct tape diagrams, ratio tables and double number lines.
- Solve equivalent ratios

Comprehensive Assessment Program

- Exit Tickets
- Quizzes
- Engage NY Assessments and Mathematical Tasks

Other Evidence

- Homework
- Classwork

Student Self-Assessment and Reflection

Students will write reflective pieces in their journals to demonstrate their learning. They will list what they learned and any changes that occurred in their thinking.

Stage 3: Learning Plan
(Design Learning Activities To align with Goals and Assessments)

Key learning events needed to achieve unit goals

- Teacher instruction
- Worksheets
- Labs

- Manipulatives
- Math Tasks

Resources & Teaching Tips

Engage NY Teacher and Student Resources and Worksheets

Accommodations / Differentiation Ideas and Tips

For struggling learners:

- Review multiplication and division facts / skills
- Draw pictures
- Provide additional support and various opportunities to learn
- Make real-world connections

For advanced learners:

- Use ratios with 3 numbers rather than 2
- Incorporate fractions and decimals