

## Interdisciplinary Unit Plan - Ireland

**Grade:** 8

**Unit Topic:** St. Patrick's Day/Ireland

**Course/Discipline:**

**Approximate Time Required:** Two to three days.

**Main Purpose of the Unit Study:** The purpose of the Unit Study is to ensure students to understand

### Standards:

(Physical Ed) S1.M1.8\* Rhythmic activities/dance Exhibits command of rhythm and timing by creating a movement sequence to music as an individual or in a group.

(Science) MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

(Social Studies) 7.6.3 Compare how cultures throughout the world meet human needs and concerns (e.g., religion, sense of belonging, celebrations)

(Math) 8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities.

(Music) MU:Re7.1.E.8a Explain reasons for selecting music citing characteristics found in the music and connections to interest, purpose, and context.

### Performance Objectives:

(Physical Ed)

1. Students will participate in an Irish Jig and will demonstrate, to the best of their ability, the five parts of the dance.

(Science)

1. Students will be able to plant potato seeds and record their observations of how the conditions (water, sun, time, etc.) influence the germination of seeds.
2. Students will explain the role of environment and the type of seed in the seeds ability to germinate

(Social Studies): Students will be able to:

1. Identify religions, cultures, holidays and celebrations in Ireland.
2. Compare religions, cultures, holidays and celebrations to other parts of the world.
3. Assess how religions, cultures, holidays and celebrations meet human needs and concerns in Ireland and around the world.

(Math) Students will calculate the population of Ireland, then they will calculate how much bigger the population of the world is.

1. Students will be given population density numbers (146.45 ppl./sq. km.) which will allow them to calculate the population of Ireland (32,595 sq. km. - needed information to complete the problem). Students will need to remember how to appropriately convert between units of measurement and will be asked to write the answer in scientific notation ( $4.773 \times 10^6$  ppl.).
2. Students will be given the population of the world ( $7.6 \times 10^9$ ), then asked to calculate how much larger the population of the world is in comparison to the population of Ireland. Then they will be asked to write the answer in decimal form (1592.29 - round to the nearest hundredth place).

(Music) Students will defend the selection of a piece as related to the context of other subjects studied.

1. Students will address works in their ensemble folders  
file:///C:/Users/Tanda/Documents/Tune-StPatrick\_With%20Humble%20Pleasure%20Lord.pdf
2. Students will select a folksong and connect it to one of their other courses.

### **Lesson Outlines:**

(Science)

1. Introduce plants and types of environmental factors that influence growth in plants
  - a. Introduce the type of environment in Ireland
  - b. Ask the students to make a hypothesis on why the potato would be a plant of choice in Ireland based on geography and environmental factors
  - c. After the potato seeds have grown, use the recorded observations to address the hypothesis made previously (takes ~ 3 weeks)

(Social Studies):

1. Using videos and PowerPoint introduce Ireland as a country.
  - a. Discuss the cultures of Ireland.
  - b. Discuss religions practiced in Ireland.
  - c. Discuss holidays and celebrations of Ireland.
2. Have students assigned to a computer be able to group up and chose a topic: religion, cultures, holidays, and celebrations.
  - a. Students will be able to research their groups chosen topic.
  - b. Students will create a visual aid (PowerPoint, Prezi, Powtoon, etc.) of their choice and present their findings to the classroom.
  - c. Students will discuss how the topics covered meet the human needs of people in Ireland and how it compares to meeting human needs to people around the world.

(Physical Ed)

1. Students will begin class in their stretch and attendance lines. Students will be guided through the stretch and warm-up routine from the class leader.
2. Have sound system ready to go, have iTunes: Morrison's Jig by The Irish Experience pulled up. Students will be in their stretch lines for the formation of the dance.

3. Show intro video on youtube of Morrisons' Jig

<https://www.youtube.com/watch?v=TH2rIBK9zOA>

4. Begin Morrison's Jig on PE central (use link for steps of dance)

<http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=9926#.Wow0CajwbIW>

- Based upon how skilled the class is and how they feel break the dance up into multiple days (Day 1, parts 1-3) (Day 2, Parts 4 & 5 after quick review of 1-3)

(Math)

1. Review how to use scientific notation.
2. Pull up interactive map of the world
  - a. Talk about different populations in different countries (US has 323.1 million; China has 1.379 billion; students can pick a third to ask about)
  - b. How would you write each of these populations in scientific notation?
3. Pull up map of Ireland
  - a. Students get into groups of four to solve this problem
  - b. Give them population density and ask them to calculate population of Ireland
  - c. Give them time; help students where needed

(Music)

1. Introduce music in folder (Tune St. Patrick *With Humble Pleasure Lord*)
2. Discuss music and culture
3. Have students select folk songs and connect them to work in other courses.  
(Meter/rhythm - math, text - social studies, etc.)

### **Procedures and Activities:**

(Social Studies)

1. Present a background of information to students to engage their interest. Allow students to form their own groups of 2-3 students per group.
2. Give students adequate time to research group topics, using library time and in class time.
3. Each group will present for 5-10 minutes on the topic selected.

(Science)

1. Preparation of potato seeds: chose where to put, set up the jars for observation, and detail what each student will be looking for -- groups of 3-4 students.

(Physical Ed)

1. Students will stretch and i will take attendance
2. Students will watch morrisons jig video
3. Students will learn the jig through my instruction and direction.
4. We will go over the jig in 4 sections, 2 on day one and 2 on day two with putting them together on day 3.

(Math)

1. When they've got that, on to the final part of the problem!
  - a. Students are given the world population
  - b. Group discussion about how to solve a problem about comparing populations
  - c. Keep notation in mind - do a sample question before giving them their own

- d. Students calculate how much bigger the world is than Ireland
2. Reflection - Students can share what they learned about scientific notation & Ireland (Music)
  1. Students will sing through the melody (Tune St. Patrick *With Humble Pleasure Lord*) for 10-15 minutes. Discussion on music and culture for 3-5 minutes.
  2. Students will select a folksong and defend their choice based on context. Presentations of 2-3 minutes.

**Instructional Aids or Resources:**

(Social Studies)

1. Educational videos, PowerPoints, notes, etc.
2. Appropriate technology for students to create their own presentation. (Computer, arts and crafts, etc.)

(Science)

1. Use photos (on powerpoint) and vocabulary from text book
2. Article on Ireland land and environmental conditions
3. Jars, potato seeds, and paper towels for seed germination
4. Lab handouts for students to record observations

(Physical Ed)

1. Music system with iTunes: Morrison's Jig by The Irish Experience
2. Video of the Jig pulled up with projector to watch in the gym.

(Math)

1. Interactive maps of the world and Ireland
2. Whiteboard & markers/blackboard & chalk

(Music)

1. Folksong collection books

**Evaluation:**

(Social Studies)

1. Activity and small-group participation.
2. Presentation.
3. Unit Test.

(Science)

1. Asses the lab handouts
2. Have each group give a brief presentation of their findings (1-2 minutes)

(Physical Ed)

1. Assess students while demonstrating Jig (students will be given full participation points for full focus either during direct instruction or video)

(Math)

1. Have students describe scientific notation in terms of how it was used in these problems
2. Solve the problems about population presented to them

(Music)

1. Participation in rehearsal