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Goals and Objectives

Florida Standards -- State of Florida NGSSS

Strands, Standards and Benchmarks

World History

Standard 1: Utilize historical inquiry skills and analytical processes

Standard 7: Recognize significant causes, events, figures, and consequences of the Great War period and the impact on worldwide balance of power

SS.912.W.1.4: Explain how historians use historical inquiry and other sciences to understand the past.

SS.912.W.7.1: Analyze the causes of World War I including the formation of European alliances and the roles of imperialism, nationalism, and militarism.

SS.912.W.7.2: Describe the changing nature of warfare during World War I.

SS.912.W.7.3: Summarize significant effects of World War I.

Geography

Standard 1: Understand how to use maps and other geographic representations, tools, and technology to report information

SS.912.G.2.3: Use geographic terms and tools to analyze case studies of regional issues in different parts of the world that have critical economic, physical, or political ramifications.

Included Concepts

The concepts taught in the lesson include:

- Allocation of resources
- Opportunity costs
- Choice
- Scarcity
- Decisions
- Tradeoffs

Instructional Objectives

Students will be able to:

- Explain and differentiate between the concepts noted above
- Analyze the tradeoffs encountered in the decisions of when and how to engage in warfare among the competing nations in WWI-era Europe
- Incorporate economics into their understanding of the challenges facing European nations as they prepared for war in the early 1900s

Suggested Courses/Grade Levels

The lesson is targeted at High School students in grades 9-12, and is suitable for classes in World History, U.S. History, or Economics.

Total Time Required

Between two and four 55-minute class periods; one to two 2-hour blocks

Resources

- *Focus: High School Economics*, Council on Economic Education (CEE). The material is also accessible on the Virtual Economics collection from the Council on Economic Education (Version 4.5)
- Computer/projection system or interactive whiteboard

- Tables (actual or makeshift) and chairs
- Zip-closure bags (snack size, three for each game set)
- Visual 1: PowerPoint slides (or similar presentation software)
- Form 1: Game map (you may wish to laminate these; expense will vary with service provider and size of map you decide to use)
- Form 2: Initial placement charts (1 for each team of combatants)
- Form 3: Army/Artillery markers
- Dice: 1 or 2 dice for each group (dice can be purchased at game or educational supply stores for nominal cost, or you can raid your board game closet)

Overview

One of the most basic, yet difficult economic concepts for students to wrap their minds around is that cost can be measured in something other than money. The concepts of opportunity cost, scarcity and allocation of resources are explored in the context of World War One battle decisions. Students assume the role of military strategists of nations during WWI, determining strategy, troop placement, movement and combat engagements. Students get to make decisions and see the consequences. For economics students this is an opportunity to see the theoretical concepts applied and played out in a real-world-based setting. For students studying history, it is an alternate perspective on the difficulties of conducting that war at that time.

Lesson Plan/Guide

Procedure

Preparation

- There should be one game map per group (ideally you will have 2-3 students per team and 3 teams per group). In a pinch, you can use 11”x17” paper to enlarge the

maps on a photocopier to the correct size to be played upon. You can laminate them if you wish.

- There should be one set of Initial Placement Charts for each group, one chart for each team. The summary page on markers, die rolls, combat and movement should be on the back of each chart; students can use these as handy guides to make the rounds go faster.
- The army/artillery markers are intended to be printed on two sides; you can do this by printing both sides on card stock or, if you want to use chip board for a more sturdy game piece you may print and glue the paper to each side of the board, then use a board-mounted rotary cutter to separate the markers. They are color-coded: red for Russia, blue for France, and the rest for Germany and Austria-Hungary. I recommend using snack size zip-closure bags or something similar to hold and store the markers.

Timing/Pacing

For World History or US History students, the lesson should come in toward the end of the WWI unit when students have gained a good working knowledge of the war and the times. Economics students should already have taken the above courses and should have prior knowledge of the circumstances and actors involved in the run-up to and early stages of WWI.

If possible, try to get through the tutorial on setup and movement before the end of the first hour of instruction, to allow the students the better part of an hour to play and get a feel for the game and its movement rules. The equipment and rules are pretty standard for war simulation board games, but students who have never played one before may need some extra time to get used to the way the games work.

Stage One

1. I began with two questions based on the difficulties that European nations faced as they prepared to go to war in the early 1900s, especially those encountered by Germany and by Russia. Have students do this on a separate piece of paper and hand it in to you. You can use these to compare with their answers to these questions at the end of the lesson. I am calling it a pre-test here, though how (or if) you want to grade it is up to you. NOTE: Do not review the answers with the students until after the lesson is complete; you will be asking them the same questions at the end of the lesson. [The main problem for Germany/Austria-Hungary was that they had to fight a two-front war and had to figure out where and how to allocate their troops and supplies for mobilization. Russia's problem was a scarcity of experienced and knowledgeable military leaders, as well as of military hardware and supplies.]

2. Start with the procedures outlined in paragraphs one through five of Lesson One, Choice, Opportunity Costs, and Decisions from the *Focus* book. This will give students a good introduction to the economic concepts for the lesson. The first few PowerPoint slides after the pre-test will help you with the set-up and initial part of the activity. They are designed so that you can use the pen pointer tool to write student responses on an interactive whiteboard.

Note about differentiated instruction – accommodation for different student learning types: This lesson is much less text-based than a standard lesson. It employs graphics, manipulatives, and cooperative learning, all of which are sound strategies for differentiation on the basis of chronological age, learning styles or ability to master English for students in the English Language

Learner/English for Speakers of Other Languages program. The game portion of the lesson can also be simplified by reducing the number of game pieces each team is allowed to bring into the game; in order to preserve presentation of the impact that the historical decisions had, that number should not be reduced by more than half.

3. A good analogy for allocation of resources is imagining you are on a camping trip and have a one-gallon jug of water. You need to drink some, your dog needs to drink some, you may need some for cooking or cleaning the fish you catch or animals you hunt, and you definitely need some to douse the fire. Figuring out how much of the water to use for each task is the allocation of resources. In the example the resource is the water; in the whiteboard exercise the resource is the hour of student time. Transition to the next part of the lesson by telling the students that they are going to relate this idea to the opening days of World War One.

4. There should be 2-3 students per team, and three teams per game board. You may assign teams or let your students form their own groups. The lesson works best with tables or desks that the students can sit or stand around. Single-seat desks can be arranged in groups of four to create a makeshift table. Give each group a game board and a set of placement charts while you explain the information on the “decisions” slide. After that, walk them through the rules of placement, movement and combat, using the slides in the presentation as examples. You may even want to show them some map examples of combat and movement to model the techniques you want them to use. Note that teams are not compelled to engage in combat or to use their full movement allowance. Point out that summaries of these instructions appear along the top edge of the map and on the back of their placement charts.

5. Note that some of the examples likely would not be used in a game (for example, attacking a clearly superior force). I have had students ask me these questions, so I have brought these examples in.
6. Help them to plot their marker placement. The reason for these charts is that the initial placement of troops needs to be a secret, otherwise the first team to place its troops would be at a disadvantage. They must pencil in their allocation on the chart before they are given the markers. In a situation where there is no break between this task and the start of the game, you should give your assistance to the Austria-Hungary team first, since they will have the most placements to make.
7. You can also point out, or ask progressive questions to help the students discover, some of the components of the placement charts. For example, some zones require a certain number of markers to be placed there to serve as reinforcements. Russia has multiple zones to reflect that its rail system was worse than that in other countries in Europe, thus making it more difficult to move soldiers to the battle front from other areas of the country.
8. To help them work out placement you should let them know the total resources in each of their bags:

NATION	INFANTRY	ARTILLERY
Austria-Hungary	21	3
Germany	32	18
France	25	10
Russia	21	14

Remind them that squares will only hold one marker, zones can hold multiple markers, and some resources must be committed to zones. The markers can only be placed in squares or zones that are within their country's borders *including Germany and Austria-Hungary* [in other words German troops cannot be placed in

Austria-Hungary to start the game, and vice versa], though they can cross borders after that. Shaded areas are off-limits for initial placement. Within those limits, teams will still have some flexibility in choosing how to allocate their resources.

9. This would be a good place to break, perhaps even to assign the placement as homework to be brought in for resumption of the game at the next class meeting. Another alternative is to have students scan and email their completed chart to you so that you can provide feedback and guidance for correcting any errors before they return to the game (this would be especially effective under a block schedule).

10. Give students sufficient time and help in working out their strategy and making their placements, but do not give them unlimited time. Since war does not stand and wait for men, at some point you will have to call for the charts to be approved and units to be placed on the map. If a team has not completely or properly mapped and placed their resources then those resources will remain unused, which might lead to some interesting alternative history!

Stage Two

1. Once the students have diagrammed and placed their markers it is time to begin the rounds. Each team rolls a die (or you may have them draw numbered slips of paper from a hat or cup) to determine the order for that round. Each team will complete its combat phase and resulting movement phase before the next team takes its turn. At the end of a round, teams must re-determine the turn order for the next round. Teams may not always get to go in the same order; such is the uncertainty of war.

2. As students begin play, circulate around the room to answer questions and observe how teams are doing. Remind teams that they can use their summary sheets as guides, and there is a summary slide you can project for the class.

3. Playing five or six rounds would be terrific, but you may only have time for two or three. Listen for conversations dealing with the difficulty of deciding where to best place resources, getting resources to where they are needed from where they started, and the overall scarcity of resources. These are all opportunities to re-emphasize the economic concepts within the historical event.
4. After the rounds have ended and the game components have been put away, lead a discussion on what the students believe they learned from this experience. Guide the discussion back to the terminology you introduced at the start of the lesson and how those terms relate to what the students experienced.
5. Once the discussion is closed, you can administer the post-test, which consists of the same two questions the students answered previously. This will allow you to see whether the students “get” the economic concepts and are employing the terms correctly.
6. If you wish, you can also have the students answer the debrief questions about how they would alter their strategy in a future session, and allow them to provide feedback on the game.

Assessment

You can utilize a variety of assessments within this lesson, including:

- Student completion of/performance on the pre-test.
- Demonstration of student learning on the post-test.
- Successful completion of placement chart.
- Constructive participation in class discussion.
- Written explanation of strategic choices made, expectations, results, evaluation of strategy, and student suggestion for alternate strategies.

I first ran this lesson with ninth grade World History students. While some were confused by the combat and movement rules, many were excited and amazed by

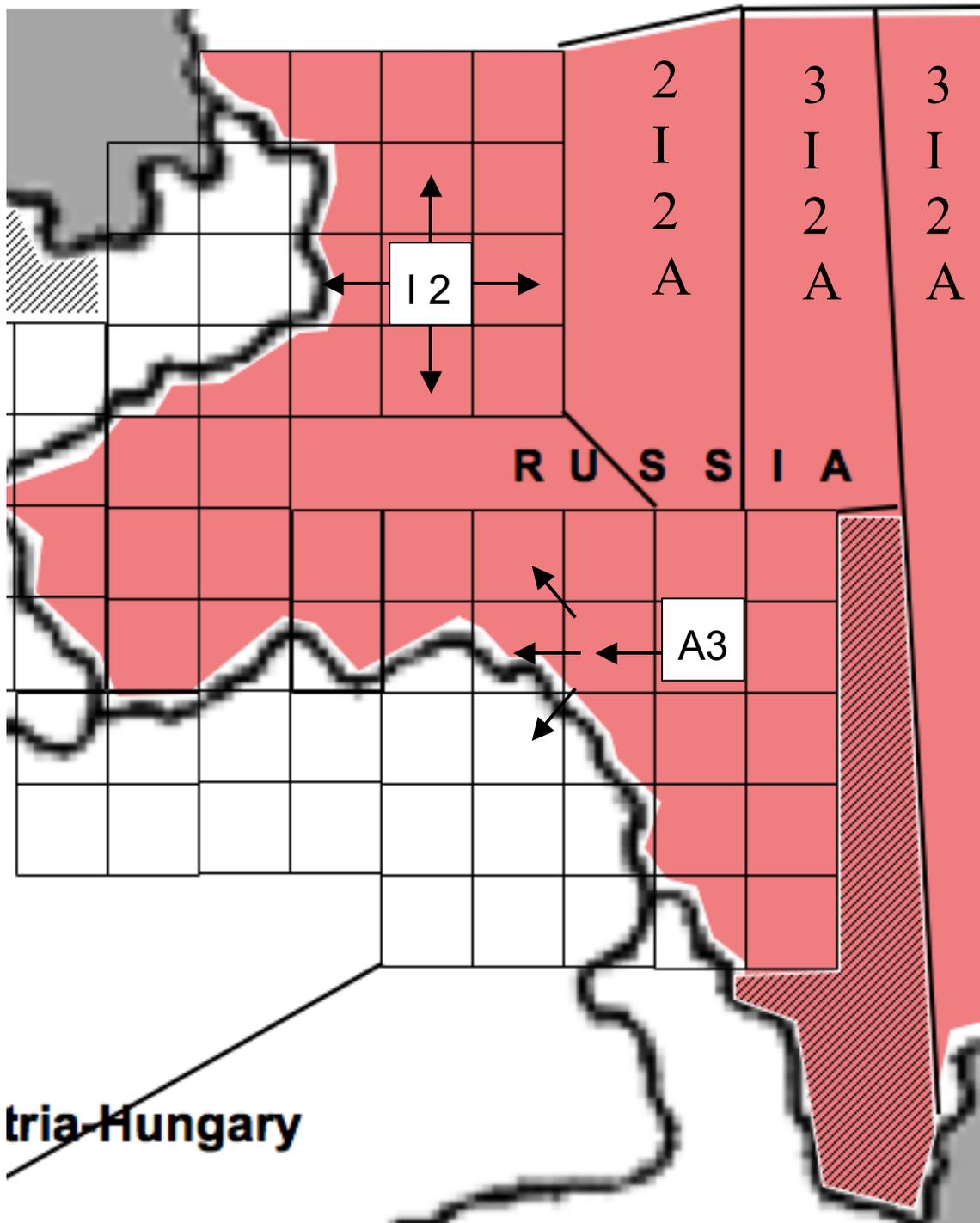
the strategy and teamwork required by the task. The biggest complaint I received was about the card stock markers I had created, which were difficult for some students to work with. I am hopeful that using chip board for markers and/or laminating the map board will make this part of the lesson go more smoothly next time; it is a trick you may want to try before your first attempt with this lesson. Good luck, and have fun with it!

Bibliography

- *Focus: High School Economics*, National Council on Economic Education (accessed on Virtual Economics 4.5)
- Council for Economic Education Voluntary National Content Standards - 2nd Edition, Council for Economic Education, <http://www.councilforeconed.org/wp/wp-content/uploads/2012/03/voluntary-national-content-standards-2010.pdf> (accessed March, 2015)
- Website: WWI Casualty and Death Tables, PBS, http://www.pbs.org/greatwar/resources/casdeath_pop.html (accessed March, 2015)
- Website: The Artillery in First World War, Passion & Compassion 1418, http://www.passioncompassion1418.com/decouvertes/english_fusees_artillerie.html (accessed March, 2015)

Attachments

Classroom handouts and teaching materials are attached beginning on the next page.



Infantry units [I] can only attack one square over, and only at right angles (no diagonal attacks)

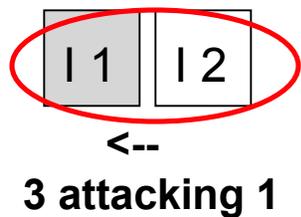
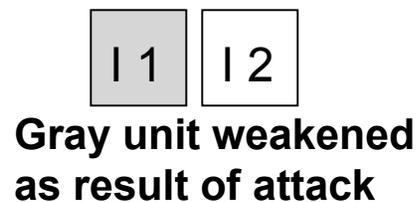
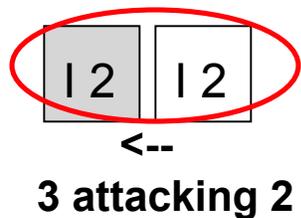
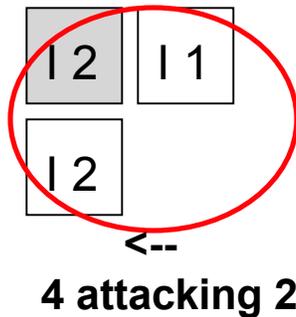
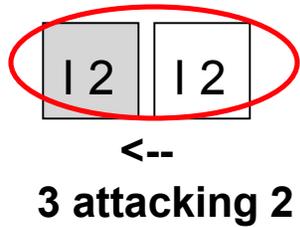
Artillery units [A] can attack two squares away. The first square must be at right angles but the second can be either at right angles or diagonally.



Name your attacking units and targets from the top of the map down; units can only attack once per turn.

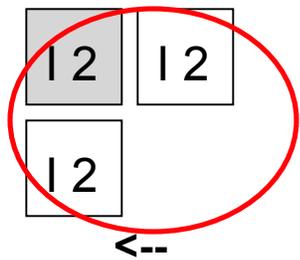
Units from the same team can combine their assault on any target/s.

Here, the gray units are being attacked.

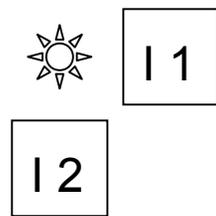


The strength points tell you how much damage your units can do. The attacker gets one extra point for attacking; only one extra point for each attack no matter how many units are teaming up on the attack.

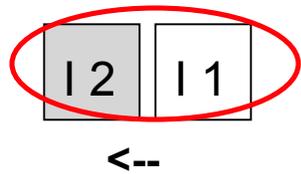
If the attacker has more strength points than the defending unit, the defender loses. If it is at maximum strength, it must be turned over to indicate a loss of strength. If it is already at reduced strength, it is removed from the board.



5 attacking 2



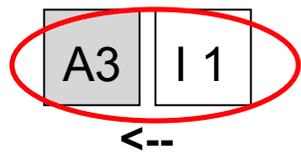
If the attacking units have more than double the strength points of the defender, the defender is immediately removed from the board.



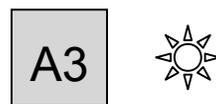
2 attacking 2



If the points are even, there is no change.

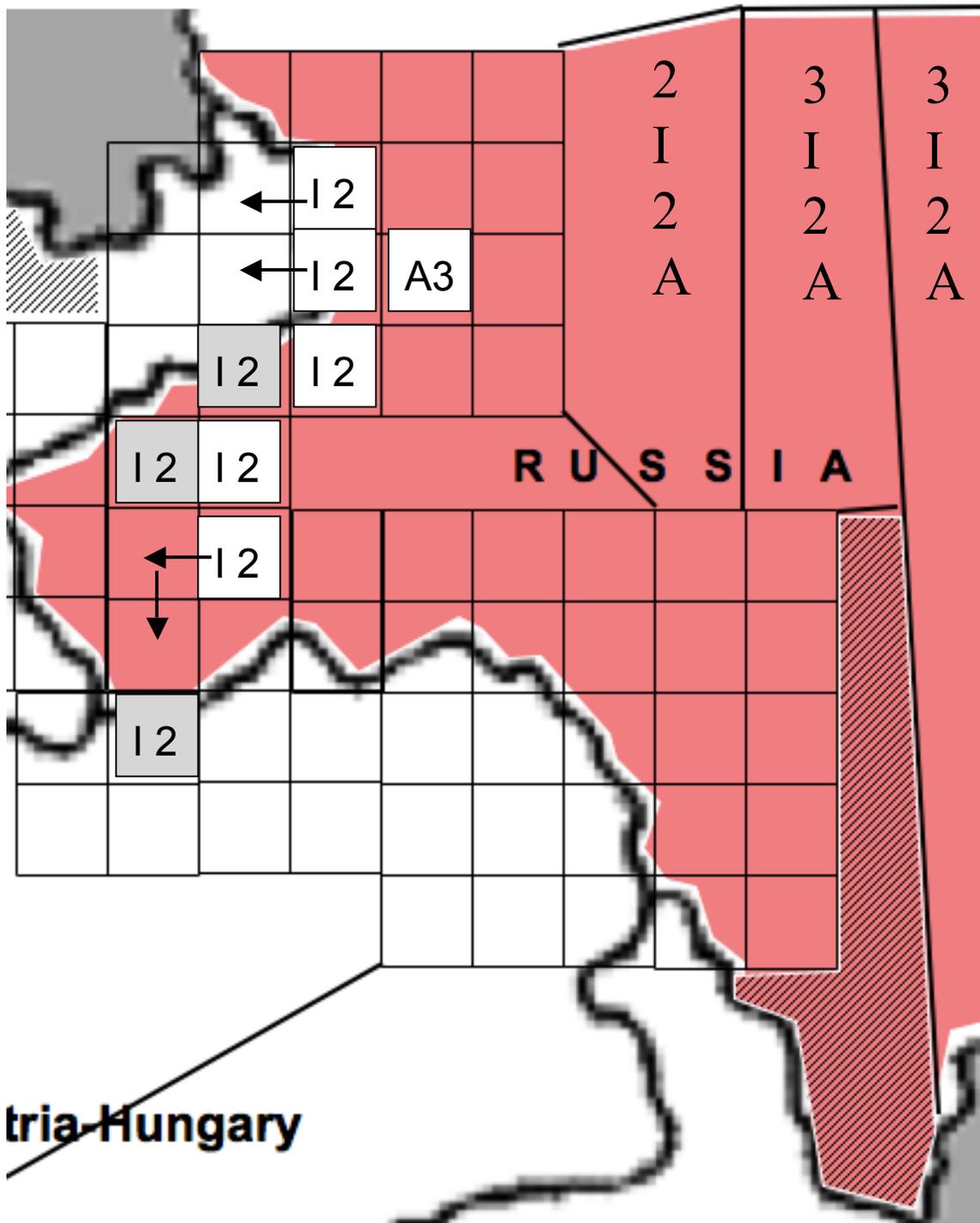


2 attacking 3

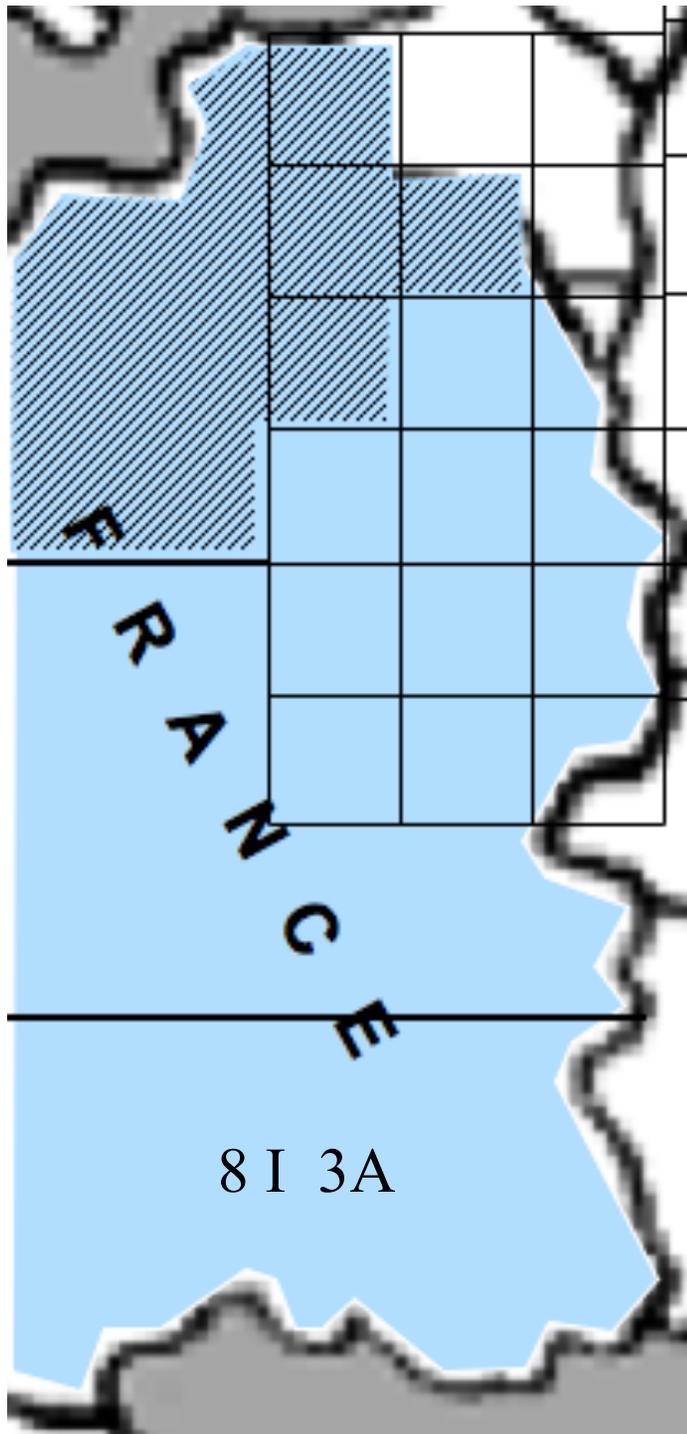


White unit loses remaining point, is removed.

If an attacker has fewer points than a defender, the attacker loses strength instead of the defender.



After all attacks are carried out, the attacking team can start movement. Surviving units may move into a space vacated by a removed unit, if it is within its movement range (2 squares for Infantry, 1 for Artillery). Movement must be made at right angles. A unit moving 2 squares can make a right or left turn; it does not have to move 2 squares in the same direction.



Initial Placement Chart

Write on this chart where you will make your initial placement of infantry and artillery resources.

I = infantry **A** = artillery

Only one resource can occupy a *square* at any one time.

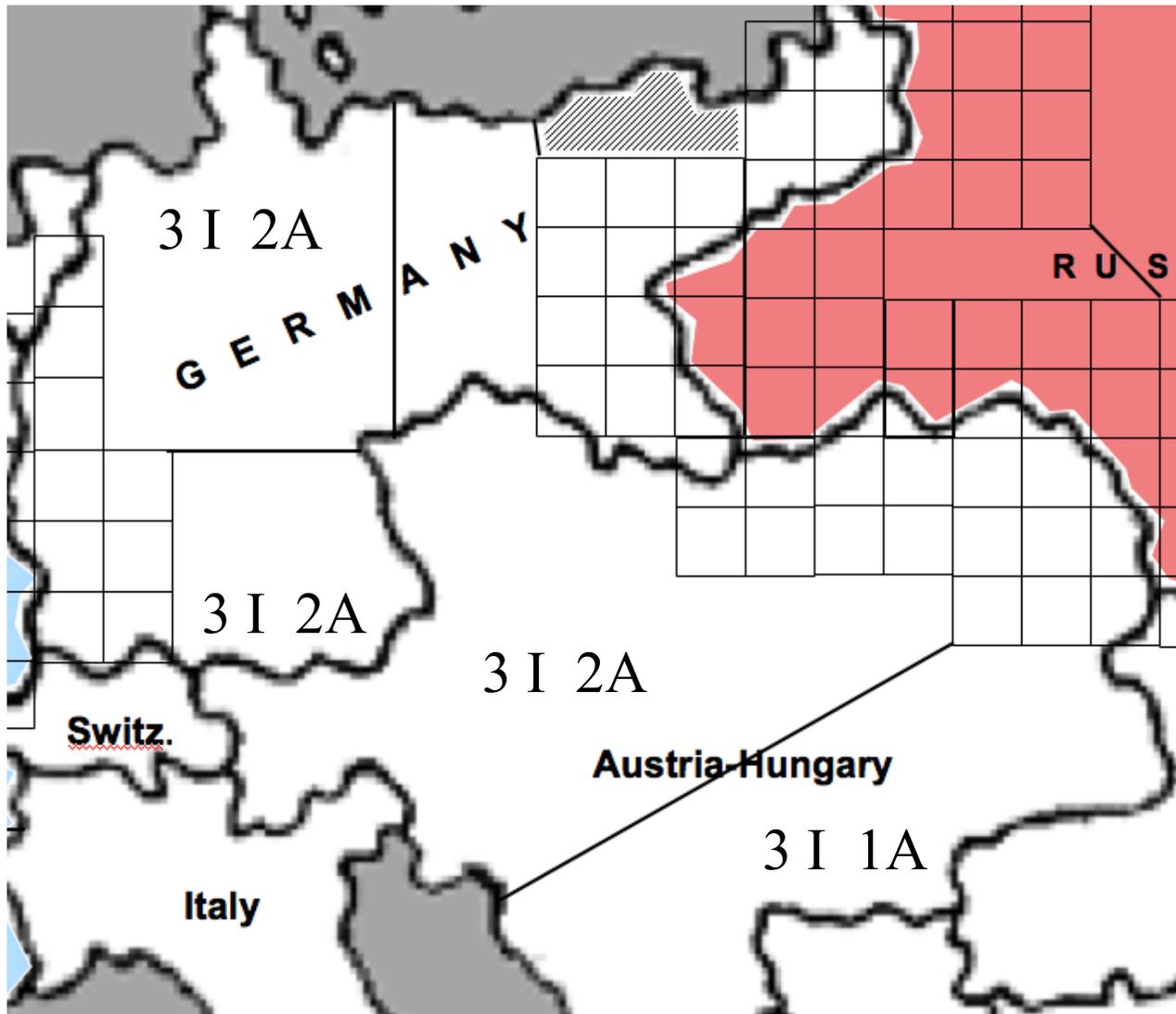
You can only place resources within your territory (if > 50% of the land area is yours).

Resources cannot be placed in any shaded area to start the game, though they can move into those areas starting with the second turn.

Areas that show a count for resources require you to place at least that minimum number there (you may place more if you wish).

You must chart your placement here and get teacher approval before you can start placing pieces on the board.

All infantry start with a strength of 2; all artillery start with a strength of 3.



Write on this chart where you will make your initial placement of infantry and artillery resources.

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You can only place resources within your territory (if > 50% of the land area is yours).

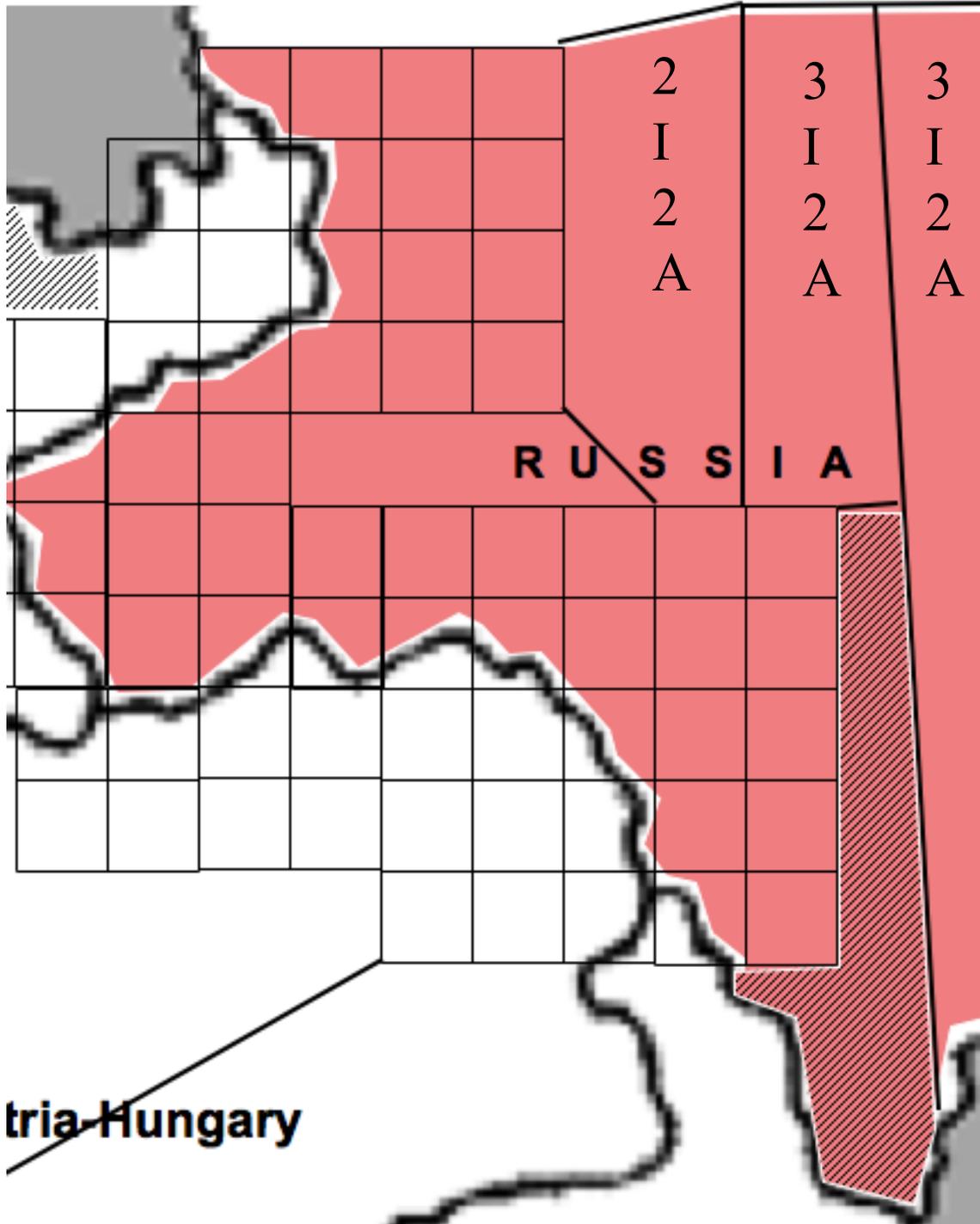
Resources cannot be placed in any shaded area to start the game, though they can move into those areas later.

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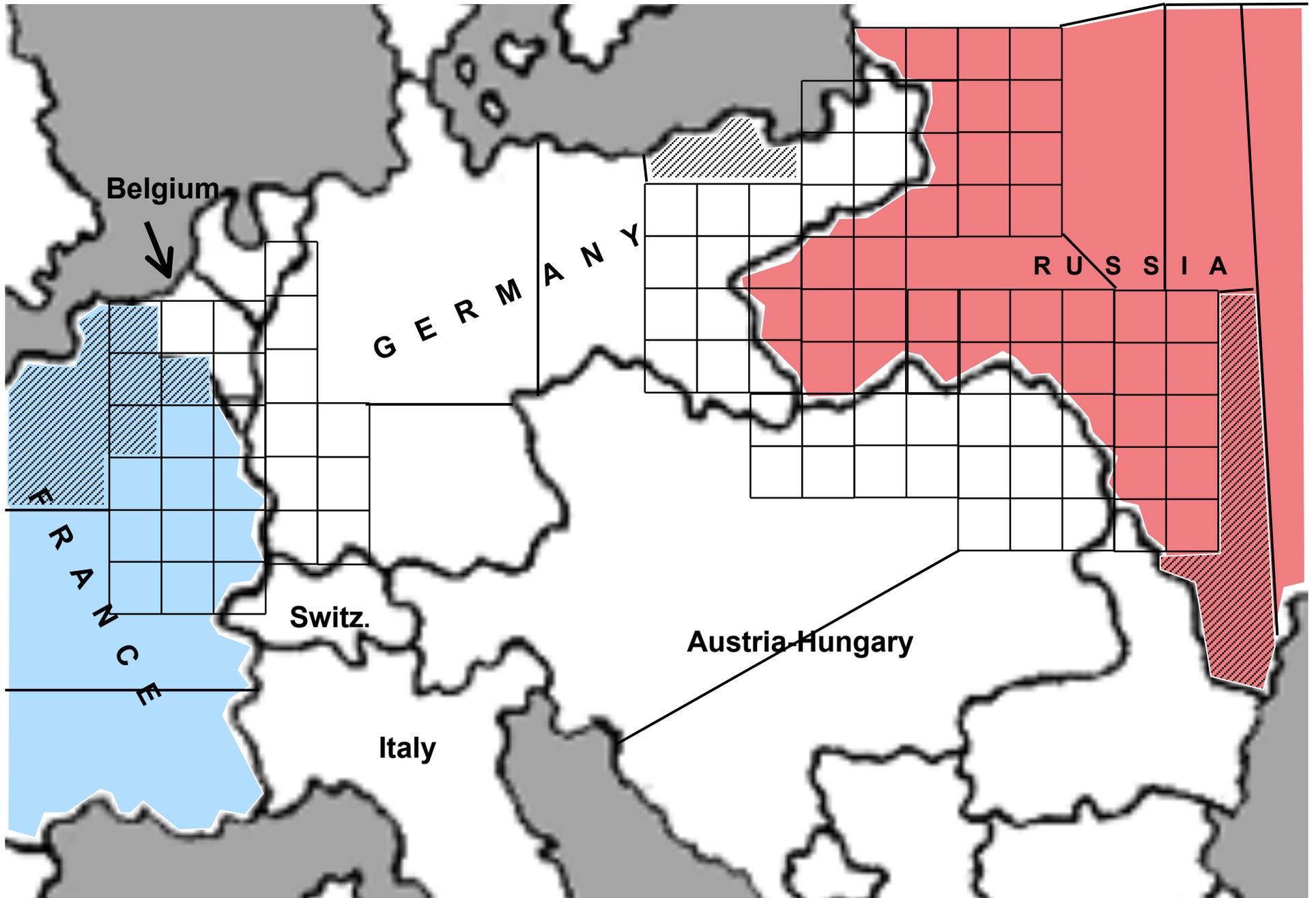
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You must chart your placement here and get teacher approval before you can start placing pieces on the board.

All infantry start with a strength of 2;
all artillery start with a strength of 3.

On each turn: 1. Determine order
2. Combat 3. Movement

Combat range: Infantry = 1 square Artillery = 2 squares
Movement: Infantry = 2 squares Artillery = 1 square



I	1	I	1	A2	A2	I	1	I	1	A2	I	1	I	1			I	1	I	1	A2	I	1	I	1	A2	A2	I	1	I	1
I	1	I	1	A2	A2	I	1	I	1	A2	I	1	I	1			I	1	I	1	A2	I	1	I	1	A2	A2	I	1	I	1
I	1	I	1	A2	A2	I	1	I	1	A2	I	1	I	1			I	1	I	1	A2	I	1	I	1	A2	A2	I	1	I	1
I	1	I	1	A2	A2	I	1	I	1	A2	I	1	I	1			I	1	I	1	A2	I	1	I	1	A2	A2	I	1	I	1
I	1	I	1	A2	A2	I	1	I	1	A2	I	1	I	1			I	1	I	1	A2	I	1	I	1	A2	A2	I	1	I	1
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I	1	I	1	I	1	I	1	A2	A2	A2	I	1	I	1			I	1	I	1	A2	A2	I	1	I	I	1	I	1	I	1
I	1	I	1	I	1	I	1	A2	A2	A2	I	1	I	1			I	1	I	1	A2	A2	I	1	I	I	1	I	1	I	1



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