Sau Ling Chan, New York

How quick can you think? A "Slapjack" review game.

Objectives:
The purpose of this activity is to provide a fun, interactive, and hands-on opportunity for students to review old content material for the New York State Regents examination. However, the design of this game can also be used to review material in any subject class.

The Original “Slapjack” Game
The design of this game originated from a common card game known as “Slapjack.” Each player receives half a deck of cards (Figure 1) and keeps the number of the cards face down in the palm of their hands. Each player takes a turn to call out a number beginning with the number one and then reveals the number of the card on the table. If the number on the card matches the spoken number, then both players will compete for the cards by slapping the deck on the table. The player that first slaps on these cards will win and their opponent would be forced to accept all the cards on the table.

On the other hand, if the spoken number does not match that on the card, then the opposing player will call out the next consecutive number and flip a card from his or her hand onto the deck that is already on the table. Ultimately, the first person that gets rid of all of his or her cards wins the game. The same rules will apply to the review activity described in this document with just a few minor changes.

The Modified Game
In this version of “Slapjack” students will substitute the Poker cards by creating their own game cards using blank index cards. Students and teachers will discuss and decide on the topics that they plan to review, and the teacher will guide the students to develop review questions based on these topics. Below are some examples of index cards for this activity.
Sample Student Index Cards (Game Cards)

(Front of the index card)

1  2  3  4

(Back of the index card)

Explain the effects of nondisjunction.  Explain this.  What does Darwin mean by “Survival of the Fittest”?  Who were Watson and Crick?

Figure 2. Examples of student-devised index cards.

Advantages to Game-Based Approach

There are several benefits to using this type of game-based approach.  (1) The activity can be highly individualized.  Students with different learning styles can create questions that best meet their levels of ability and challenge their peers to develop alternate skills.  For example, students that are more visually oriented may present their questions in diagrams or picture format, which may also help other students to learn.  (2) The game-based approach provides a fun learning environment for all students to participate in the review activity.  (3) Students are encouraged to be proactive with their own studies and focus their energy on their areas of weakness.

Materials:

- 1000 index cards (number will vary according to class size and number of questions being reviewed)
- 4 Stopwatches (one per team)
- 4 Permanent markers (one per team)
- Room with moveable furniture

Time Requirement for Game Preparation:

- 30 minutes

Time requirement for Game:

- 30 minutes
Lesson and Game Overview:

Teacher introduces game to the class
↓
Teacher discusses rules of the game
↓
Teacher demonstrates how the game is played
↓
The class divides into four different teams
(Aproximately 8 students per team)
↓
One student serves as a timekeeper in each team
↓
Students develop review questions collaboratively
↓
Students practice the game
↓
Let the games begin!

Writing the review questions:

- Divide the class into four teams (approximately 8 students per team) based on one of the four review topics they plan to review – ex. Ecology, Reproduction, Genetics, and Evolution.
- Give each student five index cards.
- Ask students to write a number from 1-4 on one side of the card (see Figure 2), and record the question on the other side. Write the answers on a small corner on the same side as the question.
- The format of these questions could be in the form of short answers, multiple choice questions, fill-in-the-blanks, problem-based questions, or diagrams.
- Encourage students to use their class notes, homework, and old exam questions to develop questions.
- Before students begin to write their questions, students within each team will discuss which subtopic they plan to write about in order to avoid repetition and maximize the variation of questions being reviewed.
- Each student will write three questions based the review topic chosen and two questions on any other Living Environment topics or laboratory skills they wish to review. The latter two questions will be considered as wild cards, where students will be challenged to recall other course material. Allow 15 minutes for students to complete this task.
- The teacher will circulate around the room to review the completed questions for clarity and ensure that questions with different levels of difficulty are included.
**Game Set-Up and Strategy:**

- The goal of this game is to encourage students to answer as many questions as possible. While students need to answer questions correctly in order to score, those with faster reflexes will have a competitive edge in this game. More importantly, it gives students with lower academic performance but faster reflexes a chance to win.

- Before the game begins divide the class into four teams – one per review topic. Each team will consist of approximately eight students. **Note:** The number of teams and students per team can vary based on class size and the number of topics your students plan to review.

- The game is divided into three levels. The number of students that matriculate to the next level decreases with each game. However, the number of topics and questions they will encounter increases with each successive stage until ultimately one student is named the overall winner. Here is a description of what happens at each level:
**Level 1 (Intraspecific Competition, 1 review topic):**
Each team of 8 will be divided into 4 groups of two students. The two students within each group will compete against each other for 5 minutes. The winners will once again be placed in groups of two and compete against each other. The winners will advance to Level 2. Allow 25 minutes for this game.

<table>
<thead>
<tr>
<th>Ecology Team</th>
<th>Reproduction Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1 vs. Student 2</td>
<td>Student 1 vs. Student 2</td>
</tr>
<tr>
<td>Student 3 vs. Student 4</td>
<td>Student 3 vs. Student 4</td>
</tr>
<tr>
<td>Student 5 vs. Student 6</td>
<td>Student 5 vs. Student 6</td>
</tr>
<tr>
<td>Student 7 vs. Student 8</td>
<td>Student 7 vs. Student 8</td>
</tr>
<tr>
<td>The two students with the highest scores will move onto Level 2.</td>
<td>The two students with the highest scores will move onto Level 2.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evolution Team</th>
<th>Genetics Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1 vs. Student 2</td>
<td>Student 1 vs. Student 2</td>
</tr>
<tr>
<td>Student 3 vs. Student 4</td>
<td>Student 3 vs. Student 4</td>
</tr>
<tr>
<td>Student 5 vs. Student 6</td>
<td>Student 5 vs. Student 6</td>
</tr>
<tr>
<td>Student 7 vs. Student 8</td>
<td>Student 7 vs. Student 8</td>
</tr>
<tr>
<td>The two students with the highest scores will move onto Level 2.</td>
<td>The two students with the highest scores will move onto Level 2.</td>
</tr>
</tbody>
</table>
**Level 2 (Interspecific Competition, 2 review topics):**
Combine and shuffle the review questions from the two opposing teams. The winners from each team will compete with a winner from one of the other teams. This pairing will be done based on the order in which each team finishes their level 1 games. The winner from this random pairing will then proceed to level 3 of the game. Allow 10 minutes to complete this part of the game.

<table>
<thead>
<tr>
<th><strong>Ecology &amp; Genetics Teams</strong></th>
<th><strong>Reproduction &amp; Evolution Teams</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology Student A vs. Genetics Student A</td>
<td>Ecology Student A vs. Genetics Student A</td>
</tr>
<tr>
<td>Ecology Student B vs. Genetics Student B</td>
<td>The student with the highest score will move onto Level 3.</td>
</tr>
<tr>
<td></td>
<td>The student with the highest score will move onto Level 3.</td>
</tr>
</tbody>
</table>

**Level 3 (Interspecific Competition, 4 review topics):**
Combine and shuffle the review questions from all four teams. There will be two students left at this level of the game. One of them will become the overall winner. Given the large number of review questions at this level, teachers can determine the overall winner by asking students to answer all of the questions or impose a 5-minute time limit to complete the game.

<table>
<thead>
<tr>
<th><strong>Ecology, Genetics, Reproduction and Evolution Teams</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology &amp; Genetics Winner vs. Reproduction &amp; Evolution Winner</td>
</tr>
</tbody>
</table>