Game Pedagogy Descriptions

Overview

Matching
Collecting
Identifying
Building
True or False
Sorting
Fill-In-The-Blank
Pairing

Overview

Each game in Squiggle Park has been designed so players practice different skills. Below there is a description of the games that are currently in use in Squiggle Park. Please note that we are always assessing our current games and they may undergo changes to make sure they are as effective as possible. We are also always busy designing new games so that players are exposed to learning and testing their skills in many formats.

Audio is used heavily in all our games, both for explaining how to play the games and giving feedback as well as in the actual game play elements. We also use audio to increase/decrease the difficulty of a game to enable more learning to occur. For example, when new high frequency words are first introduced, players not only see them written as text, but also hear the audio of the word. This enables players to begin to associate the the text form with the audio form of the word. But, as players learn to master their high frequency words, we move on to providing less clues, as players are eventually expected to be able to match the audio of the word to the text version.
Matching games relate most closely to multiple choice questions. The player is asked a question and required to identify the single matching answer. The goal of these games is for players to learn to correctly identify the single correct answer from a group of answers. The simplest version of the matching game asks the player direct questions where both the question and the answer are identical, such as matching A = A. Harder versions of the game require the player to know more about what they are being asked, such as matching different case letters (A = a) or matching phonemes with a corresponding grapheme.

Collecting games are matching games where there is more than one right answer. These games are designed to reinforce a skill, by having the player practice it within a single question. In collection games, the question finishes once players have collected all the correct answers. Simpler versions of the game use the same response for both question and answers (Questions
is A and answers are all A). Harder versions often use pictures that represent objects and the goal is to collect all objects that start with a given phoneme or grapheme, such as collect all objects that start with the "mmm" sound (mug and monkey would be correct, but apple and dog would be incorrect).

**Identifying**

Identifying games requires players to correctly identify real letters and words and is designed for players to practice their ability to quickly and accurately recognize letters and words. Players are presented with questions (currently bubbles) that move across the screen. Each question contains a single character or word. In the case of the letter games, the questions are either the letters that have been introduced during the current world (and earlier) mixed together with numbers and symbols (such as % or *). Players need to tap on the real letters, while ignoring the numbers and symbols. For words, players are presented with high frequency words mixed with and nonsense words (blap) and jumbled characters (gto). Again, players must tap on the real words while ignoring the rest.
Building games require players to correctly order components. Building games are generally used for practicing spelling. However, there are two types of building games in Squiggle Park. The first type is the more common, order the letters to spell the assigned word. However, unlike many spelling games, we focus on ordering graphemes instead of individual letters, because of Squiggle Park's focus on learning grapheme-to-phoneme correspondences. The second type of building game is more unique and focuses on ordering phonemes to "spell" a word. For this game, players need to listen carefully to the word, stretching it out so that they can determine all the individual phonemes necessary to create the word, and then listening carefully to the set of phoneme options provided, determine which ones to use and the correct ordering.

True or False

True or False games require players to determine if 2 or more options share something specific in common. In Squiggle Park, this is primarily used to compare two words or pictures to see if they rhyme, or share the same starting or ending phoneme or grapheme. For each question, students are presented with the two options. If they are words, they are presented as audio only,
and if they are objects, the picture is presented along with the audio. Below the words, the players are presented with two buttons “Yes” and “No”. The buttons include a graphical representation (checkmark and x) along with the text of Yes and No. If the two options share the specified quality in common (for example, they rhyme with each other), than the player should press Yes, and if they don’t, then the player should press No. The True or False game is a great game for use in classrooms, as the whole class can shout out the answer and decide together if it should be Yes or No. The game mechanic is simple, and much of the difficulty comes from players needing to slow themselves down and carefully listen to the words before choosing Yes or No.

Sorting

Sorting games require players to take a option and determine which basket it belongs with. In Squiggle Park, this is used in a few different ways. In the beginning, students will first encounter it when learning to match lowercase and uppercase letters together. The baskets have the uppercase letter and each option is a lowercase letter. Later, students will hear a word and need to match it with it's written form, they will hear phonemes and need to match it to its corresponding grapheme. Depending on the game difficulty, the baskets may play the corresponding audio when pressed. All sorting games are world-specific, which means they only have content from that world (most games are primarily content from that world with a sprinkling of questions from earlier worlds). This allows students to focus closely on the new content. The Sorting game is another great one to use in a classroom as a whole class, with everyone listening carefully to the option and then suggesting the basket to drag the apple to.

Fill-In-The-Blank

Fill-in-the-blank games require students to listen to a complete audio solution and then complete the provided word or sentence so it matches. In Squiggle Park, there are two forms of the
fill-in-the-blank game. In the first version, students hear a complete sentence and then they need to correctly place the missing high frequency words. In the second version, students hear a single word, and then are required to complete the word by placing the correct graphemes into the word. This game exposes students to more complex sentences and words then they would see in the other stages of the world. Because audio is used to read the entire answer to the students, we can use words that we don’t expect the student to have mastered yet on their own. For example, in the sentence game, we aren’t limited to only words that students have already mastered the GPCs for, since they are only required to correctly know and place the high frequency words from the specific world. This exposure to words outside of the normal constraints of the world allow students to start to see how the content they are learning is used in more complicated words and sentences. And, by having to carefully stretch out words to locate the missing graphemes or follow a sentence to identify the missing words, they will start to learn these words as well.

Pairing

The pairing game is essentially memory, will all the cards starting face up. The reason the cards are face up, is that the goal of the game is for students to correctly match content together, not to be able to remember where they saw the content. Pairing games are probably the easiest game in Squiggle Park, as they have only a few questions, and the entire game (all the pairs) are visible from the start of the level. However, it is a quick way for students (and teachers) to confirm that players are correctly making the connections between content. For example, some of the games require students to pair the audio of a high frequency word to the text. Others require students to listen carefully to a word (while seeing an image of that word) and then pair it with the middle sound of the word. Because this game appears to be so quick and easy, it’s a good one to work with for students that need to be reminded to “slow down” and listen carefully. The pairing game appears in most worlds for content, and can be a great one to do as a class on a projector, while working on the new GPCs or High Frequency words of a world.