



Bugs Lesson Plan

Introduction:

- Show the children a set of the Top Trumps Bugs cards
- Ask children to predict the bugs on the cards by naming the bugs that they are already familiar with.
- Tell them that in this lesson they are going to learn the names of more bugs and play a fun game called Top Trumps and compare information about different bugs.

Suggested lesson procedure:

Lesson 1

- Divide the class into pairs
- Give a pack of the Top Trump Bugs cards to each pair.
- Ask the children to lay the cards out face up either on their desks or on the floor.
- Give instructions such as "Find the praying mantis". Children find and hold up the corresponding cards as fast as they can. In the case of bugs which are new or difficult to pronounce, have the children repeat the names after you, sounding them out as they go.
- Once the children are familiar with the names of the bugs on the cards, ask individual children to take turns calling out the names of bugs for their classmates to find.

CCSS.ELA-LITERACY.RF.1.2

Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

Lesson 2

- Tell the children that they are going to use the Bugs cards to play Top Trumps.
- Divide the class into groups of 3-6.
- Explain that each group needs only one pack of cards to play the game. Ask the children to put any extra packs to one side or turn them into you.
- Tell the children that there are three categories of bugs on the cards, arachnid, arthropod and annelid.
- Pre-teach the meaning of these categories:
Arachnid: a kind of animal that has eight legs and a body formed of two parts, the cephalothorax and the abdomen

Arthropod: an insect that has a segmented body, jointed limbs and usually a shell that undergoes molting

Annelid: any segmented worm, including earthworms, leeches and various marine forms

- Explain and demonstrate the game to the class using the cards from one of the groups. Have one child deal all 30 cards face down equally between themselves and the other members of their group. The children should have their cards face up in a pack and look at their first card only. Children must not let their team members see their cards. The child chooses the “best” statistic which is usually the highest from the first card and says for example, “I’ve got a black widow spider. A black widow spider scores 1,800 for lifespan. The other members of the group take turn reading the same statistic from their cards and say, for example, “I have a leech with a lifespan of 3,500. The child with the highest value for the statistic wins. The winner collects the first card from their partner or from all of the members of the group, having the highest statistic for this category.

CCSS.ELA-LITERACY.RI.1.5

Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.

CCSS.ELA-LITERACY.RI.1.6

Distinguish between information provided by pictures or other illustrations and information provided.

CCSS.ELA-LITERACY.L.1.5.A

Sort words into categories to gain a sense of the concepts the categories represent.

CCSS.MATH.CONTENT.K.CC.B.4

Understand the relationship between numbers and quantities; connect counting to cardinality.

CCSS.MATH.CONTENT.K.CC.C.6

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

Lesson 3

- Begin a classroom sing-a-long of the alphabet song.
- Tell your students that today’s lessons will involve their TOP Trumps cards and the alphabet.
- Hold up the “ladybug” card and ask the students what letter they see at the beginning of the card.
- Ask them to make the “L” sound.
- On the board or whiteboard write “Leslie loves licking lollipops” or “Linda likes to learn her lessons”.
- Have a student read the sentence aloud.
- Have another student identify how many words in the sentence begin with the letter “L”.
- Explain that this sentence contains *alliteration*, or the repetition of several words that begin with the same word or sound.

- Ask students to call out their favorite bugs from their TOP Trumps deck of cards. To model the activity, use one of the cards that a student has suggested and brainstorm aloud a few words that begin with the letter.
- Create a sentence using the insect or bug and some of the words the students thought of. For example, if “bumblebee” was the choice, the sentence could be “The bumblebee buzzed around the flower bud.” Obviously, the sentences can be nonsensical...and the students especially love these! (Emphasize that not every word needs to start with the same letter, and that students should prioritize being creative!)

CCSS.ELA-LITERACY.RF.1.2

Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

Lesson 4

Bug Crossword Puzzle

Puzzle solving is an active type of learning, and will engage students with the material more than passive types of review techniques do. Crossword puzzles also have the advantage of appealing to different learning styles. Visual learners often have strong puzzle-solving skills, and feel great satisfaction when they complete one. Auditory learners enjoy step-by-step reasoning, so they also benefit from the sequential steps of completing a crossword. Even kinesthetic learners enjoy the multi-task strategies required to solve a crossword puzzle!

Crossword solving involves several useful skills including vocabulary, reasoning, spelling, and word attack skills. To solve any crossword puzzle, a person must be able to identify and understand the terms being used. This often involves acquiring new vocabulary or terminology. It can also involve making differentiations between similar words or phrases. Correctly deciphering a crossword also requires exact spelling, which for students may mean practicing dictionary skills. Other important skills required for completing these puzzles include making inferences, evaluating choices, and drawing conclusions. Another benefit of using crossword puzzles in the classroom is that they are associated with recreation, and can be less intimidating for students as review tools and utilizing the TOP TRUMP cards in order to determine the correct answer, drives the students into the text of the cards and enable them to learn many new facts contained within them.

- Each student or group of students will require a complete set of cards.
- Students may need explanation as to how a crossword puzzle works. This also gives you an opportunity to reinforce the notion of across and down. (Horizontal and vertical may be used for older students.)
- Explain to the students that all of the answers to the crossword puzzle can be found by reading and re-reading the text in their TOP TRUMP cards.
- Pass out the crossword puzzle, the word bank and the clues and the fun ensues!

CCSS.ELA-LITERACY.RI.1.1

Ask and answer questions about key details in a text.

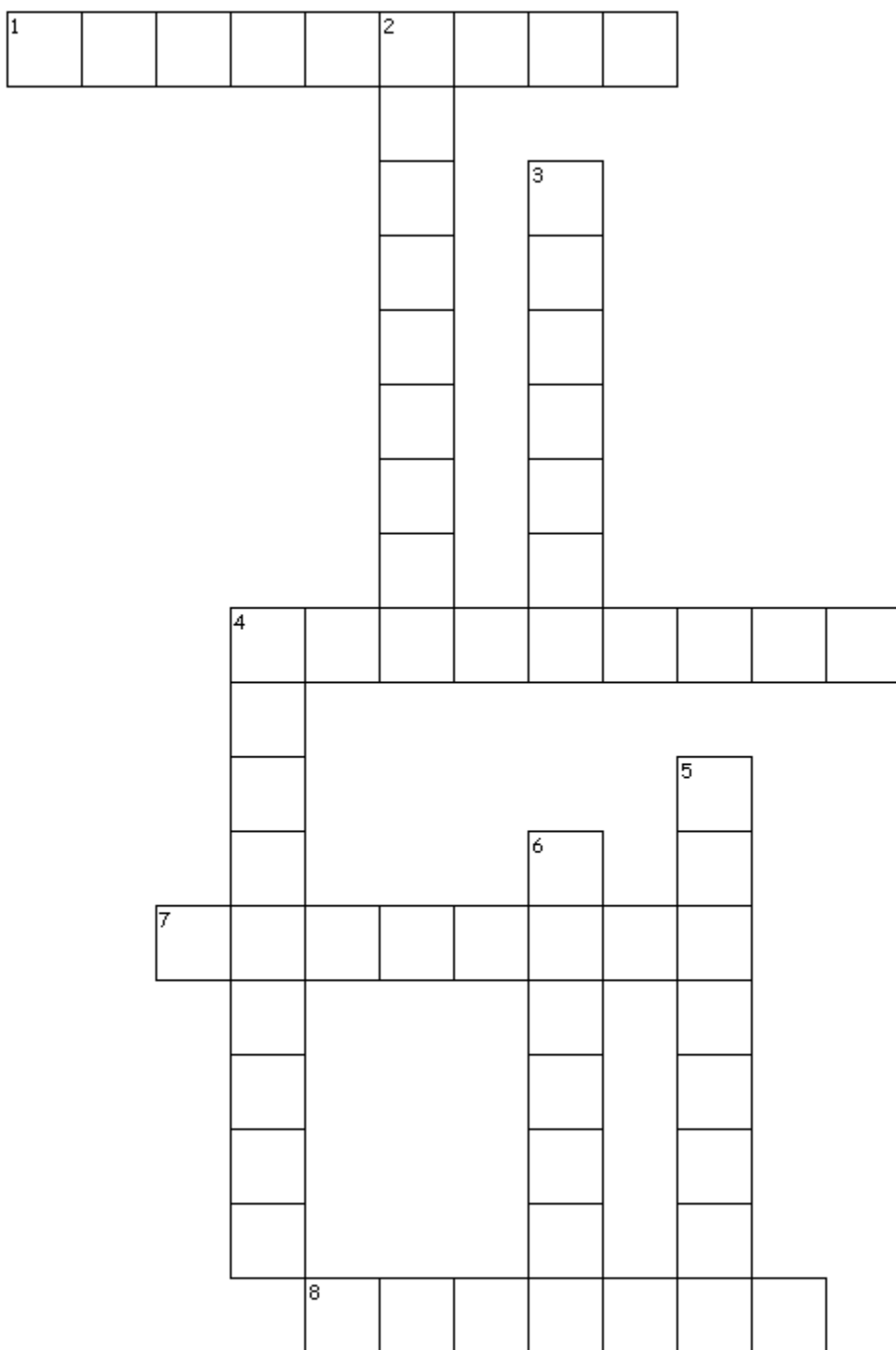
CCSS.ELA-LITERACY.RI.1.6

Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

CCSS.ELA-LITERACY.RL.1.1

Ask and answer questions about key details in a text.

Bugs Crossword Puzzle



Across

1. Their thick coat insulates them and the bright color warns other insects that this bug can sting!
4. Their front and back wings move separately so they can stop and change directions in mid-air.
7. They are able to fly up to four hours without resting and suck the blood of animals and humans.
8. Will attack and eat their kind

Down

2. They are loved by gardeners and farmers because they break up the soil!
3. They eat wood and are responsible for a lot of damage to houses!
4. Their babies-known as nymphs-begin life underwater.
5. This arachnid is heavily-armored and one of the most dangerous animals in the world because of its fast-acting stinging venom.
6. They produce light by a chemical reaction in their organs.

WORD BANK

Firefly
Praying mantis
Scorpion
Mosquito
Dragonfly

Damselfly
Termite
Bumblebee
Earthworm

Bug Answer Sheet

Across

- 1 Bumblebee
- 4 Damselfly
- 7 Mosquito
- 8 Praying Mantis

Down

- 2 Earthworm
- 3 Termite
- 4 Dragonfly
- 5 Scorpion
- 6 Firefly

Lesson 5

Guided Research

Three main focus points for early learners of the Common Core State Standards are:

Going deeper and making connections to learning

Building vocabulary that is rich and varied

Exposing children to research and creative thinking

These are the steps that can be used to begin the process of teaching guided research.

1. What do they know? (Accessing prior knowledge)
2. Fill in the gaps (Many students do not come to school with background knowledge, so you will need to add to the information on the TOP Trumps cards by bringing in picture books or other resources. Images from other books or online resources can be helpful as well.)
3. Establish a desired understanding (This is where you and your students decide what they want to learn about and determine an “essential question”. They base their research on this question. With the younger learners it is best to develop a clear outline to help them maintain focus and look for important facts.)
4. Where can I get help? (What resources do we have available? Will your students go to a website or are their other experts available? The librarian? For the earliest web users, you will want to have specific bookmarked websites made available for them utilizing pre-determined keywords to support their research. Have students go to their TOP TRUMPS cards for valuable information.)
5. Explain the assignment and begin the actual research.
6. Discuss findings and organize information. (Depending on how the research groups were determines, this may be a whole or small group process. Students will discuss their findings and develop ways to organize their information. Make sure that they have answered their essential question!)
7. Produce and share information (Suggestion: Have students write a short biography using the TOP TRUMP cards as well as the other resources mentioned above.)

CCSS.ELA-LITERACY.W.1.7

Participate in shared research and writing projects.

CCSS.ELA-LITERACY.SL.1.1

Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.