

INTRODUCTION

Science A-Z provides game packs to supplement the resources in many of the Life, Earth, and Physical science units. Below are some questions and answers to help you get started.

QUESTIONS AND ANSWERS

What will I find in this Game Pack Guide?

This guide lists fun activities and games you can use with students to reinforce unit concepts and vocabulary. Some activities and games work best with certain resources, while others can be used with a variety of the resources listed below. Check each activity or game’s suggested materials list, then make as many copies as your class will need prior to each activity.



What does a game pack consist of?

The game pack for each science unit consists of:

- vocabulary cards
- word sort placemat
- image cards
- blank image cards
- game boards
- Wordo board

When and why should I use the game packs?

While students may see these activities as a fun diversion, there is real value to using the vocabulary and image cards with your class. These resources can provide teachable moments in which the teacher or peers help students understand why a term matches up with a definition or image. Additionally, the games and other activities can provide informal assessment of comprehension before, during, and after unit instruction.

Can the activities and games be used with more than one science unit at a time?

Certainly! If your class has studied several Science A–Z units, the game packs can be a great way to further cement their understanding, and to let students practice for cumulative review. Simply shuffle cards from multiple units into a combined deck.

Is this list of activities and games comprehensive?

Not at all—feel free to modify these activities and games any way you see fit, and add your own. You might also challenge students to come up with their own uses for the game pack resources.



Which cards should I use?

The vocabulary cards contain all terms from the unit vocabulary list, but the image cards only contain images of some key vocabulary terms. Choose the resource that best meets your needs. You can also have students create their own image cards by drawing or pasting a picture on the back of a vocabulary card or a word card, or by using the blank image cards.



What other materials will I need?

You will need a copier, copy paper, and a paper cutter or scissors to separate the cards. You may want to mount the paper cards onto card stock or other materials, and you may even want to laminate the cards to preserve them for multiple uses. Some activities and games may require the use of additional materials, such as magazines, newspapers, library books, or the Internet. Enlist the help of student or adult volunteers to prepare materials.

What grouping of students should I use?

The activities and games described in this guide can be used with whatever grouping you feel works best with your class. Some may lend themselves best to pairs, small groups, or the whole class, but all can be adapted to meet the needs of your classroom. Make copies accordingly.

How should I prepare the various cards?

It depends on the activity. For some activities and games, you may want to cut apart the image cards separately from the word cards. In other activities and games, it will be helpful to cut the cards in strips, so both the image and accompanying word card face the student. In still other activities and games, fold and glue the strips together so that the word card is on the back of the image card.

Should I print the cards in color or in black and white?

The image cards will be clearer in color, but they will be identifiable in black and white as well. You might consider making at least one set in color for display purposes, then copy the rest in black and white.

What if I have a very limited copying budget?

You can project the cards on a screen or display them on an interactive whiteboard, instead of making paper copies. Cover up certain cards to avoid revealing answers. Then choose activities and games that do not require the use of physical cards.

Do some image cards match up with more than one word card, or vice-versa?

Yes, they might. However, once students try to pair up all the terms with all the images, they should find that each term has a distinct image card with which it should be matched.

Why do some cards have numbers on them?

The word cards beside the image cards have numbers for use with the game boards. When you choose an activity to use with the game boards, the number on the card gives a value to each term, which corresponds to the number of spaces students may move on the game board. You can customize the cards to meet the needs of your students by changing these values prior to making copies.

ACTIVITIES



Word Sort

Materials: *Word Sort Placemat, vocabulary or image cards, scissors, glue sticks*

Give each group a complete set of word cards, definition cards, or image cards. Challenge students to choose ways to group the terms. Groupings can focus on the concept of the word, the word structure, or any other logical means of classification. Once groups have decided how to group their cards, give them copies of the Word Sort Placemat. Each copy provides two places to stack cards in groups, so provide enough copies of the placemat for the number of groups chosen. Once the cards have been sorted, let each group explain to the class how they grouped the terms, and ask students to give examples of why they placed cards in certain groups. As a variation, place several randomly selected cards in front of each group, and have them discuss ways that all the cards are related.

Poetry

Materials: *lined paper, pencils*

Let each student choose a vocabulary term and write a poem about it. Examples of poems that may work well include acrostic, concrete, haiku, tanka, diamante, rhyming, and cinquain. Encourage students to share their completed poems with the class. For lessons that support instruction of many poetry genres, visit the Poetry tab on [Reading a-z.com](http://www.readinga-z.com).

Spelling Practice

Materials: *Vocabulary or image cards*

Give students copies of either card type, and allow them to practice spelling terms with a partner. Suggested fun activities include Cheerletters (students spell the word by forming each letter with their arms and legs), Skywriters (students trace the letters in the air to spell each word), Be Write Back (students trace the letters of a word on a partner's back or palm and the partner tries to guess the term), or BackWords (students spell the word backwards and the partner identifies the word).



Flashcards

Materials: *Vocabulary or image cards, scissors, glue sticks*

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips and then fold and paste them so that one side has a vocabulary term and the other has either the definition or image for that term. Have students quiz each other by holding up one side of the card and having a partner identify what is on the reverse side.

Five-Word Story

Materials: Vocabulary or image cards, scissors, lined paper, pencils, construction paper (optional)

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips so the students can view both the term and its definition, or the term and its image. Let each student or group select five words at random and use them in a short story. When done, they may create a storyboard poster in which they paste the image cards on construction paper and write the sentences of their story alongside the images.

Scavenger Hunt

Materials: Image cards, magazines or other consumable publications, scissors, construction paper, glue sticks

Make copies of the image cards. Cut the pages into strips and then fold and paste them so one side has a vocabulary term and the other has an image for that term. Have students examine the provided image, then search in magazines, newspapers, flyers, etc. for more images depicting, or related to, the term. Students can paste their pictures on construction paper to create a collage poster for that term.

Which Word?

Materials: Vocabulary or image cards, scissors

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips so a student can read both the term and its definition or see both the term and its image. A student draws two different cards and asks a partner or the group a question that begins with, "Which word—" Then the partner or group must decide which of the two words answers the question correctly. For example, "Which word is a plant part that absorbs water?" or "Which word is an adjective?"

**Story Train**

Materials: Vocabulary or image cards, lined paper, pencil, scissors, glue sticks

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips and then fold and paste them so one side has a vocabulary term and the other has either the definition or an image for that term. Give one card to each student in the class. Have each student write one sentence to begin a story, using their term in a meaningful way. Then have all students pass their card to another student in a rotation, and add the next sentence to their own story, using the next term. After a certain number of rotations are complete, encourage students to share their stories with the class. For younger students, conduct the activity orally, in a story circle. The group can create one continuous story as each student adds a sentence by using their term.

Sentence Starters

Materials: Vocabulary or image cards, scissors, lined paper, pencil

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips so a student can read both the term and its definition or see both the term and its image. List some suggested sentence starters on the board, such as, "I would—," "I wouldn't—," "Once upon a time—," "What if—," "Did you know—," or "Have you ever—." Each student takes a turn drawing a card from a pile or bag and completing one of the sentences by using the term in a meaningful way. For a challenge, have students draw more than one card and use the terms meaningfully in a single sentence. You can have students write their responses on lined paper for individualized, informal assessment.



Picture Match

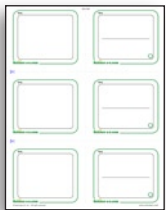
Materials: Image cards, scissors, glue sticks, bag or box, vocabulary cards (optional)

Make copies of the image cards. Cut apart each card individually and spread all the word cards on a table, face-up. Place all the image cards in a bag or box. Have students take turns drawing one image card from the bag or box and try to match it up with a word card by covering it up. Students should take turns placing image cards atop word cards until all cards are matched. If some cards do not seem to match up, have the group try moving certain image cards to other word cards until all match. The activity can also be done in reverse, with image cards face-up and word cards being drawn. For a challenge, copy the vocabulary cards and spread them out on the table. Then challenge students to determine which words match up with an image card and which do not.

Make Your Own Image Cards

Materials: Blank image cards, pencils, coloring supplies, vocabulary and/or image cards

Give each student a page of blank image cards. Encourage them to use either a term from the existing image cards (for those who may need an example to follow) or one of the vocabulary cards that does not come with an image. Students should write a vocabulary term in one blank box and draw their own image to depict that term in the adjacent box. Then these cards can be used with many of the activities and games described in this guide. The cards can also be pasted onto larger paper and bound to form a picture dictionary.



GAMES



Many of the games that follow can be used with the game boards. Choose a game that uses the image cards. When students complete a task with a given card, they may advance a game marker the number of spaces indicated on the card. Game markers may include small toys, pieces from other board games, or even scraps of colorful paper. Students should follow special instructions printed on the game boards. Choose from the selection of thematic game boards and make one copy of it for each group. For whole-class activities, each marker can represent the progress of a whole group. The first player or group to reach the end wins.

Draw It!

Materials: Vocabulary cards, chalkboard or large drawing paper, scissors, chalk or crayons

Make copies of the vocabulary cards. Cut the pages into strips so the student giving the clues can read both the term and its definition. Have one student hold the strip and draw a picture that will help teammates guess the term. Drawings can be made on the board, on butcher paper, easel chart paper, or scratch paper. The other students should guess the term, and whoever guesses correctly gets to draw the next term. For a team variation, have one student from each group draw the same term for his or her group simultaneously, and give a point to whichever group guesses the term first. Then rotate the students so all get a turn drawing. The team with the most points wins.

Wordo



Materials: Wordo boards, board game markers, vocabulary cards or image cards
Write the vocabulary terms on the board. Give each student a copy of the Wordo board and fifteen board game markers (dry macaroni, dry beans, scraps of paper, etc.) Instruct them to choose one of the terms to write in each blank box on their Wordo board. As you read a definition or hold up an image card (hide the word), ask a volunteer or the whole class to identify the word. Then, students who have that vocabulary term on their boards may cover it with a marker. The first student to complete a certain pattern wins the game. Patterns may include three in a row, a complete horizontal row of five, an "X," four corners, blackout, or other arrangements.

Jumble It!

Materials: Vocabulary or image cards, scissors, bag or box

Make copies of just the word cards from either the vocabulary cards or the image cards. Cut apart each vocabulary term and place them in a bag or box. Have students take turns pulling a word card and scrambling the letters on the board or on scratch paper. Then have a partner try to guess the term. For a challenge, give one point for guessing the term and another point for providing an accurate definition.

Concentration

Materials: Vocabulary and/or image cards, scissors, cardstock (optional)

Make copies of the vocabulary cards, the image cards, or both. Cut apart each card individually and spread all the cards on a table in rows and columns, face-down. (It may be helpful to mount the cards on cardstock or other paper to keep them from being see-through.) Have students take turns turning over two cards, trying to make a match between a term and its definition or a term and its image. When a correct match is made, the student keeps that pair and may go again. When a match is not made, the student turns the cards back over and it is the next player's turn. Once all cards have been picked up, the player with the most pairs wins. For a challenge, require that students pick up a word card, a definition card, and an image card together.

It's in the Bag

Materials: Vocabulary and/or image cards, scissors, bag or box

Make copies of the vocabulary cards or the image cards. Cut apart each card individually. Put all the cards in a bag or box and have one student at a time draw two cards. They must explain how the two cards are related or use both in a single sentence together. If the group judges that the student was successful, the student keeps the pair. If a student draws a term and its matching definition or image card, they get to keep the pair and take a bonus turn. Play continues until all cards are gone, and the student with the most pairs of cards wins.



Go Fish

Materials: Vocabulary or image cards, scissors, cardstock (optional)

Make two copies of either the vocabulary cards or the image cards. Cut apart each card individually and shuffle them together in one deck. Deal four cards to each player, then spread all remaining cards face-down in the central playing area. (It may be helpful to mount the cards on cardstock or other paper to keep them from being see-through.) Players take turns asking one other player if they have any cards containing a certain word, which must match up with at least one card in his or her own hand. If that player does have any cards with either the word, definition, or image for that term, they must surrender all of them to the player who asked. If not, they say, "Go Fish" and the player who asked must draw a card from the central deck to add to his or her hand. Play continues in a rotation. Any time players collect a set of four cards for the same term—whether they be word, definition, or image cards—they should show them to the group and lay them down on the table. Once one of the players empties his or her hand of cards, the player with most complete sets at that time wins the game.

Word Associations

Materials: Vocabulary or image cards, lined paper, pencil

Make copies of either the vocabulary cards or the image cards. The sheets do not need to be cut apart. Have students challenge each other to write as many words as they can think of in 30 seconds that are related in some way to a given word. After 30 seconds, let the group judge whether each new word deserves a point, and keep a running tally of points scored. Continue doing the same with more words, and then tally the final score when finished.



Twenty Questions

Materials: Vocabulary or image cards, scissors, cardstock (optional)

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips so a student can read both the term and its definition or see both the term and its image. (It may be helpful to mount the cards on cardstock or other paper to keep them from being see-through.) Have one student choose a card strip as the first term. They should read the definition or examine the image to check for understanding. Then the rest of the group must ask “yes-no” questions to narrow the focus and to eventually guess the word. Whoever guesses the word correctly gets to go next, but if no one guesses it after 20 questions, the word is revealed and the same student may present a new word.

Word Clues

Materials: Vocabulary or image cards, scissors, cardstock (optional)

Prepare cards as in Twenty Questions. Play is similar, except instead of the group guessing, the student who picked the word must give clues to the group to help guess the word. Whoever guesses it correctly may go next. One variation is to allow the clues to be only one word each. Another variation is to dictate that each guesser is allowed only one guess per round; if all guessers use up their guesses without the word being discovered, the presenter reveals the word and may take another turn giving clues.

Terminoos

Materials: Vocabulary and/or image cards, scissors

Make copies of either the vocabulary cards, the image cards, or both. Cut apart each card individually and place all the cards in a shuffled deck. Place one card face-up on a table, then deal an equal number of cards to each player. One player at a time may lay down a card from his or her hand so that it touches one side of any other card on the table (without overlapping), as long as they can state one valid way the terms are related. Players may not connect two cards that contain the same vocabulary term in any form. Play can continue until the first player plays all his or her cards, or until all players have played all their cards.

Match-up, Lay-down

Materials: Vocabulary or image cards, scissors

Make copies of either the vocabulary cards or the image cards. Cut apart each card individually and place all the word cards in a shuffled pile, face-down. Deal the definition or image cards to the players until all players have an equal number of cards. Players take turns drawing a word card from the stack. If they have a card in their hand that matches the word card, they may lay down the pair in front of them. If not, they must discard that word card face-up on a discard pile. The next player may either pick up the top card from the discard pile, or the top card in the stack, and try to make a pair to lay down. Play continues until one player has played all the cards from his or her hand. The player with the most pairs in front of them wins the game.

Torpedo!

Materials: Vocabulary or image cards, scissors, lined paper, pencils

Make copies of either the vocabulary cards or the image cards for each group. Cut the pages into strips so the students can view both the term and its definition, or the term and its image. Give each group one or two minutes to list as many things as they can about that term, including related terms, examples, definitions, and details. Once time has expired, have groups take turns reading aloud one item from their list. If no other group has the same response on their list, the group gets two points. If any other group has the same (or a very similar) response on their list, they should shout, "Torpedo," and each group with that answer gets one point. Once all groups have revealed all their answers, move on to more terms. In the end, the group with the highest total score wins.



Act It Out

Materials: Vocabulary or image cards, scissors, glue sticks, cardstock (optional)

Make copies of either the vocabulary cards or the image cards. Cut the pages into strips so the students can view both the term and its definition, or the term and its image. (It may be helpful to mount the cards on cardstock or other paper to keep them from being see-through.) One student at a time tries to act out the term with gestures and movement, but without speaking or mouthing words, as in charades. Then the rest of the group should try to guess the term. Whoever guesses the term correctly gets to act out the next term.

Other Games

Materials will vary

Encourage students to suggest ways the game pack materials can be used to play other familiar games, or to play variations of those described in this guide.