

Jibber-Jabberwocky

Focus on Language Arts

In *Wonderland: Alice's Rock & Roll Adventure*, Alice must battle the fearsome Jabberwock, a character from the poem "Jabberwocky" by Lewis Carroll. The poem is full of nonsense words: words that have no meaning in English. But the **context clues** in the poem give us an idea about what the nonsense words mean. We also get some help from Tweedle Dee and Tweedle Dum, who define "brillig" (the time you begin broiling things for dinner), "slithy" (lithe and slimy), and "toves" (something like badgers, and also something like lizards). Read "Jabberwocky", found below, aloud with your family or friends. What are some of the other nonsense words that Lewis Carroll uses? What do you think they mean?

Jabberwocky

Lewis Carroll



'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe:
All mimsy were the borogoves,
And the mome raths outgrabe.

"Beware the Jabberwock, my son!
The jaws that bite, the claws that catch!
Beware the Jubjub bird, and shun
The frumious Bandersnatch!"

He took his vorpal sword in hand;
Long time the manxome foe he sought—
So rested he by the Tumtum tree
And stood awhile in thought.

And, as in uffish thought he stood,
The Jabberwock, with eyes of flame,
Came whiffling through the tulgey wood,
And burbled as it came!

One, two! One, two! And through and through
The vorpal blade went snicker-snack!
He left it dead, and with its head
He went galumphing back.

"And hast thou slain the Jabberwock?
Come to my arms, my beamish boy!
O frabjous day! Callooh! Callay!"
He chortled in his joy.

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe:
All mimsy were the borogoves,
And the mome raths outgrabe.

Now it's your turn to write some nonsense poetry of your own! With your family, write several nonsense words on scraps of paper. If you need help coming up with nonsense words, try combining two or more words to create a new one (i.e. stretchy + funny = frunchy). Put the paper in a hat or jar, and have each person draw four words at random. On your own, come up with a definition for each word, and use it in a sentence. See if you can create four sentences (one for each word) that fit together to make a short poem!

Share your poems out loud. Can you use context clues to guess the meanings of each other's nonsense words?

Marvelous Mobiles

Focus on Visual Arts

On her journey through Wonderland, Alice encounters several characters who give her advice (though some of it is more useful than the rest). Each and every character that Alice meets shapes her view of the world and gives her food for thought. Think back on the people and animals in *Wonderland*. Which characters do you think had the greatest impact on Alice?

In this activity, you will create a mobile of characters who influenced and affected Alice. You will need:

- Two wooden dowels or chopsticks
- Paint, markers, or crayons
- Cardstock or other thick paper
- Yarn or twine
- Beads
- Hot glue

To begin, paint or decorate your wooden dowels. Ask a grown-up for help gluing them at perpendicular angles. When the dowels have dried, tie a loop of string around the intersection in order to create a handle. Set this aside for the time being.



Next, create a representation of five characters Alice encounters, using the art supplies of your choice. What colors do you associate with each character? What shapes? What instruments or musical styles? As you create your artwork, you can choose to represent each character *literally* (by creating, for

instance, a representation of their costume) or *abstractly* (by creating shapes, colors, or symbols that remind you of the character).

When you're done, cut each picture out and have a grown-up help you punch a hole at the top. Cut five pieces of string at various lengths (12-18 inches). Tie a string to each drawing, and add beads to the string to weight it down.

Tie the other ends of the string loosely to the dowels. Hang your mobile up to make sure that it balances and spins properly. Adjust the strings as needed (either by sliding them closer or farther from the center, or by shortening or lengthening the strings) and then tie them tightly so they don't shift.



You've just made a mobile!

Extension: Who in your life has impacted you on *your* hero's journey? Reflect on your life so far. What are the major events that you remember? How have you changed throughout the years since you were born? Think about the people who have been most important to you throughout your life so far, and create a character mobile based around the people who have shaped you.

Family Game Night

Focus on Math

In her journey through *Wonderland*, Alice meets some playing cards that work for the Queen of Hearts. Now it's your turn. With just a regular deck of playing cards, you can practice your arithmetic while having fun as a family!

➤ Memory Math

For this game, all face cards have a value of 10. Aces have a value of 1.

Spread the cards out in rows, face down. Decide on a number from 1-10 that you are playing for, such as 7.

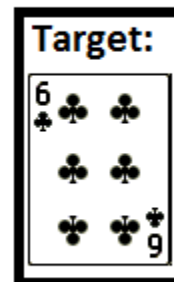
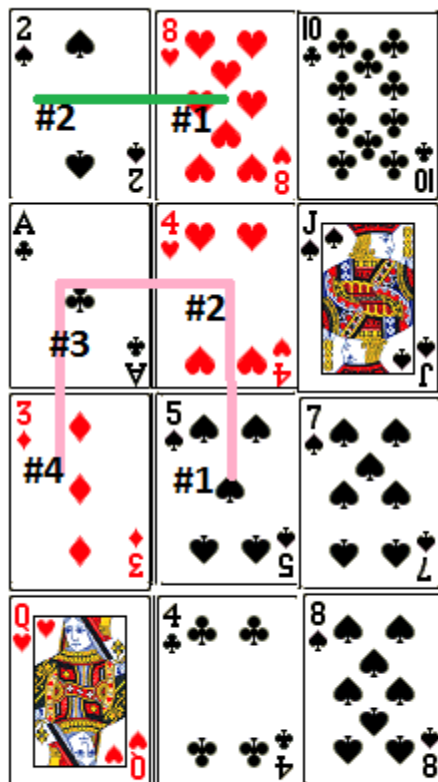
Now, take turns flipping over two cards at a time. If you can add the cards up to reach the number that you're playing for (i.e. $5+2=7$), or if you can subtract one value from the other to reach the desired outcome (i.e. $Q-3=7$), then you get to keep the pair. If the cards do not equal the desired sum or difference, flip them back over. Pay close attention during each player's turn, so that you can remember the location of the cards you might need in the future.

The game is over when you can't make any more winning pairs. The player with the most cards at the end of the game wins!

➤ Fun With Functions

For this game, all face cards have a value of 10. Aces have a value of 1.

Spread 12 cards out, face up, in four rows of three cards. Draw one card from the top of the deck to decide your target and set it aside. Now, use any function (addition, subtraction, multiplication, division, or even exponents) to combine card values in order to reach your target. You can only connect cards that are next to each other.



Sample solutions:

Example: 8 of hearts
minus 2 of spades = 6

Example: (5 of clubs
minus 4 of hearts plus 1
of clubs) times 3 of
diamonds = 6

You get to keep every card you use, so see how many steps you can involve! When claiming your cards, state your mathematical sentence aloud. Older students who have learned about the order of operations should be encouraged to include parentheses as they state their sentences aloud.

Once cards have been claimed, fill in the holes with new cards from the deck. If you can't come up with an equation during your turn, you can pass. If no one can come up with a successful equation, shuffle the deck and spread out 12 new cards. At the end of the game, the player who has collected the most cards wins.

➤ Fraction War

For this game, all face cards have a value of 10. Aces have a value of 1.

This game is just like War, but with the added opportunity to practice your fractions (both proper and improper!).

Divide the deck evenly between two players. Each player flips over two cards. The first card is the numerator of the fraction, and the second is the denominator. The player with the larger fraction wins all four cards, and adds them to the bottom of their deck.

If the fractions are equivalent, each player should place two cards face down, and then flip over two more cards to create a new fraction. The player with the higher fraction wins both piles (12 cards total).

The game ends when one player concedes, or when one player has won the whole deck.

Musical Membranes

Focus on Science

Wonderland: Alice's Rock & Roll Adventure is a show driven by music. Each of the characters we meet expresses themselves through rhythm and melody. And when Alice defeats the Jabberwock at the end of the show, she does so by playing music! Do you remember which instruments each character played? Was their music high or low? Fast or slow?

Music is created when sounds of varying pitches are combined, rhythmically, to make melody. But did you ever stop to think about why sounds have pitch?

Sound occurs when a vibrating object vibrates the air around it, creating changes in pressure that vibrate our eardrums. Our brains interpret these vibrations as sound. The more often the vibrations occur within a time frame (such as a second), the higher the *frequency*. Objects that vibrate at a higher frequency have a higher pitch.

This might sound confusing, but it's actually simple to observe! In this activity, you will create your own instrument – a *membranophone* – using simple household objects. You will need:

- A disposable plastic water bottle
- A latex or vinyl glove
- A drinking straw
- A piece of thick paper or cardstock
- A rubber band
- A hole punch
- Scissors

Ask an adult for help cutting the waterbottle in half. You'll want to make sure to cut in a straight, even line around the water bottle. Recycle the bottom half of the water bottle. Next, use a hole punch to punch a hole as far away from the cut edge of the water bottle as possible.



To create the membrane that gives the membranophone its name, cut the fingers and thumbs off the glove. Next, cut the glove open to form a rectangle. Stretch the rectangle over the cut end of the water bottle, and then secure it by wrapping the rubber band around the bottle opening several times. Make sure that the membrane doesn't cover the hole you punched!

Tightly roll your paper to create a tube. The tube should be narrow enough to fit through the neck of the bottle. Insert the tube until the end *just* touches the membrane, and then release it so that it expands and fits snugly.

Lastly, insert the drinking straw through the hole you punched. When you blow through the straw, your breath increases the pressure in the bottle, causing the membrane to rise. When this happens, the air is forced down the paper tube, and the membrane returns to its original position. As you continue to blow air through the straw, the membrane will vibrate quickly, which causes sound!



Can you work out how to change the pitch of the membranophone? Try the following steps and see what you discover:

- Change the length of the paper tube by cutting it in half. Do you think a shorter tube will produce a higher or lower pitch? Why?
- Change the tension of the membrane by pressing against the cut edge of the bottle as you blow through the straw. Pushing against the membrane will create more *slack*. Do you think more slack will produce a higher or lower pitch? Why?
- Wind and brass musicians create different sounds through *embouchure* – how they shape their lips against the mouthpiece of their instrument. See if you can change the embouchure of your mouth. Try buzzing your lips against the straw, playing through pursed lips, and wrapping your lips around your teeth. How does the sound produced by the membranophone change?

Activity from: <https://www.exploratorium.edu/snacks/membranophone>

Dear Me

Focus on Language Arts/Health

Wonderland: Alice's Rock & Roll Adventure is a coming of age story, in which Alice conquers her insecurities and emerges stronger and more self-assured. Do you relate to Alice? What character traits do you have in common with her? Do you share any of the same worries? If you have ever felt insecure or uncertain, you're not alone. Uncertainty opens us up to discovery, which is an important part of growing up and learning to understand ourselves.

In this activity, you will write a letter to your future self, seal the letter up, and open it in a year. Start by describing where you are in life currently. How do you feel about your school? Who are your closest friends? What do you like about yourself? You can include as many details as you want. Next, write about the year ahead of you. What do you think will happen to you over the coming year? What are you excited about? What are you worried about? What are some goals that you hope to accomplish? Finish your letter by asking your future self some questions about who they are. Seal your letter in an envelope, and on the outside write:

Sealed: [Today's Date]

To Be Opened: [A Year From Today]

In a year's time, you'll be able to reflect back on how you've grown and changed!

Grown-ups, you can do this activity with your children. Or instead of writing a letter to your future self, you might consider writing a letter to your past self. What do you wish you'd known when you were the same age as your children? What advice would you give yourself? You can share your letter with your child now, or wait until they open their letter in a year's time.

Hats Off To You!

Focus on Cooking

The Mad Hatter is known for his fabulous hats. Now, you can make your own top hats... in the form of delicious cookies! These cookies are just right for a tea party or for eating at home with your family and friends.

This recipe is fairly simple to make. You will need:

- 6 sandwich cookies
- 8 oz of semi-sweet chocolate
- 2 tablespoons shortening
- 12 large marshmallows
- Sprinkles, mini M&Ms, licorice, or anything else you would like to use as decoration!

Open the sandwich cookies and scrape out the frosting. Lay the cookies out on wax paper.



Melt the chocolate and shortening in a microwave-safe bowl, in 30 second intervals. Stir until the chocolate and shortening melt together. Be careful not to burn your chocolate!

Dip each marshmallow in the melted chocolate, and then place the marshmallow on top of a cookie. Then cover each cookie/marshmallow with melted chocolate. (You can use a spoon, or carefully dip each hat into the chocolate.)

Decorate your marshmallow hats with sprinkles and candy! If the chocolate on your hats sets, you can use a toothpick to add a little more melted chocolate as “glue.”

When you finish, let your hats set for a few minutes before you eat them!

Rock N’ Research

Focus on Social Studies

Wonderland: Alice’s Rock and Roll Adventure is driven by rock and roll music. Rock and roll typically includes a heavy, steady beat, with simple melodies. But beyond that, rock and roll can include a variety of instruments, from electric guitar to saxophone, or even flute (in the case of the band Jethro Tull). Rock and roll evolved from jazz, blues, gospel, and country music, and it can sound like any of those styles. So rock songs can sound very different while still being part of the same genre. In the show, varying styles of rock and roll are used to give each character a different way of expressing themselves through music.

In this activity, you will explore the variety of rock and roll and how the genre has evolved throughout history! Start by interviewing your parents and siblings (and any other family members you want). You can even include your pets! Find out what year each of them was born, and create a timeline of

birthdates. If you want, you can also include other significant years, such as the year each family member started school, or the year your parents got married.

Next, find one famous rock song for each year. Ask a grown-up for help searching the Internet and with making a mix CD or playlist!

When you listen to the songs on your CD, can you hear how rock has changed through the years? Discuss with your family how the rhythm and melodies change across songs. Now, consider the lyrics of the songs. Do the central themes change over the decades?

Garden Outing

Focus on Science

The Queen of Hearts has a garden filled with roses. In order to keep the Queen happy, the playing cards paint all the white roses red. But in reality, plants and flowers come in every color, shape, and size, and each plant has unique beauty.

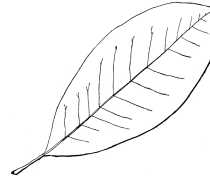
Take a trip with your family to the Botanic Garden. Use the scavenger hunt worksheet at the back of this guide to focus your exploration!

Botanic Garden Scavenger Hunt



Find: A tree with a compound leaf

Type of tree: _____



Find: A tree with a simple leaf

Type of tree: _____

A monocot flower has 3, 6, or 9 petals. Draw a picture of a monocot flower you find.

A dicot flower's petals come in multiples of 4 or 5. Draw a picture of a dicot flower you find.

Draw a picture of a red flower you find that is NOT a rose.

Type of flower: _____

Draw a picture of a white flower you find that is NOT a rose.

Type of flower: _____

What do roots get from the ground?

Your answer: _____

_____.

Why do trees lose their leaves in the winter?

Your answer: _____

_____.

Some flowers eat bugs. True or false?

What can the rings of the tree tell us?

Your answer:

_____.