## KINGS LANDING

# LEARN HOW TO MAKE A THAUMATROPE AT HOME

& ABOUT THE PASTIMES OF VICTORIAN CHILDREN

ELEMENTARY & MIDDLE SCHOOL

## **OBJECTIVES**

Learn how to make a Thaumatrope at home
Provide students with a brief introduction to what a Thaumatrope is and how It works
Learn about the rise of games in the Victorian era

## GRADE LEVEL(S)

- Elementary & Middle school
- 6+ is recommended

## MATERIALS NEEDED

- Pencil
- Paper
- Glue
- Straw
- Scissors

### LESSON

#### VICTORIAN TIMES & THE GROWTH OF GAMES

Named after Queen Victoria, who reigned from 1837 until her passing in 1901, this era saw a lot of change as society became more industrialized, focused less on agriculture, and developed a larger middle class. The middle class sat between the wealthy who did not have to work and the poor who struggled daily and did manual labour to survive. The middle class, also known as "white-collar workers," worked as teachers and clerks. These



types of jobs did not rely so much on performing manual labour, so the people stayed cleaner than labourers, hence the term "white-collar." With the growing middle class and society becoming more urban, middle-class families had more money and leisure time to play. With this new leisure time, people during the Victorian era played a wide variety of card games and board games. Card games such as snaps and old maid were especially popular with the children of this era.



#### OLD MAID

The objective of "Old Maid" is to not be the player at the end of the game holding the "Old Maid" card. Playing with a deck of 52 cards, one Queen card will be left out of the game so there is an odd number only one card without a match. This card is the "Old Maid" card. Cards will be dealt until the deck is gone and, depending on the number of players, will affect the number of cards each person has. Players will look at their hand of cards and remove any pairs they may have. Once that step is done the game begins. Players select a card from the player on their left without knowing what it is and add it to their deck in hopes of finding a match. If they get a match, they remove both cards from their hand. This goes around until all pairs have been found except the singular "Old Maid." Whoever holds this card loses.

#### SNAPS!

Using a deck of 52 cards with three or more players, the objective is to win all other players' cards. A dealer will hand out the deck clockwise to each player. The number of people participating will determine the number of cards each player has. Some players may end up with an odd number of cards, which is fine. After all the cards are dealt players cannot look at their deck and must simply leave them face down in a row in front of them. The person to the right of the dealer will start the game by flipping over their first card. Only one card is flipped. Players continue taking turns flipping a card until someone spots two cards with matching values by two different players. When someone sees the matching cards they yell, "SNAP!" and get the pair of matching cards. The winner is the player who ends up with all of the cards.







#### THE PASTIME OF CHILDHOOD

Childhood of the past was nothing like childhood today. Usually, young boys spent their time farming, mending fences, maintaining the home and barn, caring for the animals and hunting with their father. The little ladies would spend their time caring for younger siblings, sewing, cooking, gardening, and helping around the house. Only after their work and studies would the children play. They made balls from wool and leather, played with Thaumatropes, and threw a horseshoe onto a peg. Girls played with dolls and sewed doll clothes while boys learned how to carve whistles and fishing rods using a pocketknife. Toys like these played a role in teaching and preparing kids for their life as an adult.

#### WHAT IS A THAUMATROPE?

The Thaumatrope (THAW-muh-trope) was a popular toy introduced in the early 19th Century. It works by creating an illusion based on the 'Persistence of Vision.' By spinning the toy slowly, you will see each image by itself. When you spin the toy faster your eyes combine the images see them as one image. The image on the right shows a picture of a Thaumatrope from the booklet, "Every Boy His Own Toy-Maker," published by F.M. Lupton in 1874.

#### THE SCIENCE BEHIND THE THAUMATROPE

The Thaumatrope uses something called the 'Persistence of Vision.' When your eyes view an image, the retina keeps seeing that image after s it has disappeared (1/30th of a second after). So, if a new image has appeared before your retina is done responding, your brain blends the images together and merges them as one.

## ACTIVITY

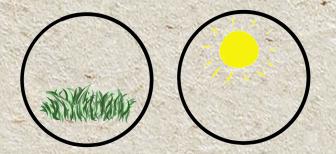
INSTRUCTIONS TO MAKE A THAUMATROPE

Step 1: Take your plain piece of paper and draw two circles that are the same.



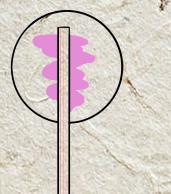
Step 2: Take your scissors and cut out your two circles.

Step 3: Once you decide what you want to draw, take one of your circles and draw one element or part of the image. Take your second circle and draw the second element. Be extra careful to draw each separate element in the spot you want them to be when the image is combined.



Step 4: Take one of your circles and flip it over to the blank side and apply glue, then do the same for the other circle.

Step 5: Take your straw and place it vertically down the center of one of your circles. The straw will act as the Thaumatropes handle.



Step 6: Place the second circle on top making sure the image is facing up and the side with glue is attached to the straw.

Step 7: Hold the two circles gently to the straw until they dry.



Step 8: Once everything is dry, pick up the Thaumatrope with the handle in your hands and give it a spin. Watch your drawings come to life!



#### TIME TO GET CREATIVE!

After creating your own Thaumatrope feel free to share it with us, we would love to see them! You can email jenna.fitch@gnb.ca or tag us on Facebook and Instagram @KingsLandingNB. Happy creating!

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## SOURCES

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