

# Archamelia™

THE HOUSE OF A THOUSAND STORIES

## TUTORIUM

the Archamelia  
Carrier

Part 2



# Rocket

Lift the inner panel to create an astro-platform, latch the garage door in place, and 3... 2... 1... Lift off!

## Explorers

Locate all the objects listed below! Look closely, they can be anywhere!

- alien x 4
- sheriff
- key
- box x 4
- astronaut
- satellite dish
- stardust
- telescope x 2
- howling coyote
- sun
- moon x 2
- Earth
- staircase



## Explorers

On the walls of Archamelia™ are these silly expressions. Point each one of them out!

- "It's written in the stars"
- "shooting star"
- "blue moon"
- "cow jumps over the moon"
- "worm hole"

Now that you've found them, what do they mean anyway?

## Builders

Find the planets floating in Archamelia™ space. Do they look familiar? They're marbles! Any spherical object can become a planet in your imagination.

Search your home for planets. Use them to build a solar system for your rocket-launching adventure.

## Scholars

By the way, why are planets spherical? Moons too? What if they looked like floating pyramids? Or donut-shaped?! Silly indeed.

How many planets and moons make up our solar system? And what is our solar system called anyway? What's the difference between moons and planets?

Need to remember the planets? Just know "My Very Excellent Mother Just Served Us Noodles!" What does that even mean?!

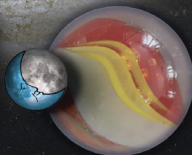
## Creators

Invent your own solar system. How many planets are there, and what are they named? Do they have moons? What are your planets made of? Cotton candy? Spiders? The color indigo? And what shape are your planets?

Does anyone or anything inhabit your solar system?

## Storytellers

I'm Shloh, the Sheriff. Write about my latest adventure keeping the universe safe with my best friend, Moonblue!



Invent a time traveling machine below

## S12 Scholars

Plants. Weird! How many ways are plants different than people? And in what ways are they the same? Are they actually aliens?



## E9 Explorers

There are a bunch of different types of plants. Like deciduous and coniferous. Some plants love the desert, and others live in the water. Learn about plants and how special they are. Can you name the alien plants attacking Archamella™?

## T10 Storytellers

We're Sanjay, StarPie and Skiddledeedoo, the sleuthful, succulent scrutinizers. We have more questions than we have answers. In fact, we spend so much time asking questions that we never get anything done! Tell our story?

## B7 Builders

Did you see how Skiddledeedoo is surfing on a stolen satellite array? What a scoundrel! Build your own Skiddledeedoo and satellite surfboard using objects found around your house.

Yarn, paper clips, cardboard, and pipe cleaners would work. Or even an actual succulent plant! Just make some feet with some construction paper and then tape them, along with some googly eyes, to a little pot! Happy adventures!

## S13 Scholars

Did you know the security firm Guardex is named after Dexter. That's the inventor's dog. You can see Dexter's face pictured somewhere else on Archamella™. Find Dexter!

Why is the word "GO" placed precisely where it is? HINT: It has to do with something above and below.

The fence for the house becomes a satellite array when it expands into a rocket. What is an array? What do satellites do?

What is the Kuiper belt? Check online, or visit a local library. There are some fascinating objects in the Kuiper belt. How did we discover its existence, if no one has ever been there?

Learn about Galileo Galilei and why he's remembered as the father of astronomy, observation and the scientific method.

Learn about [blue shift](#). This is the phenomenon that helped Galileo discover that some stars weren't stars, but in fact planets! That observation led to the idea of a heliocentric solar system. Why was this controversial at the time?

## E10 Explorers

Identify the rockets hiding behind the Archamella™ shuttle. HINT: The first word is a moon of Saturn, and the second is a reference to twins.





## E11 Explorers

Figure out who lives in the Archamella™ Apartments? Are they celebrities? What makes them famous?

### NIGHTTIME ADVENTURE

Take your Archamella™ rocket for a nighttime flight! All you need is a flashlight! Pack for lift off in your backyard, after the sun has set. Shine the light to guide your path and touch down in foreign lands. What kind of insect-creatures do you discover at night? What are the sounds you hear?

## C9 Creators

The interior of the platform is a perfect place to stash your dolls and figurines for launch. Imagine them walking through the rocket doors to get ready.

Using objects from around the house, create some billowing smoke and gently tape it to the base of the rocket. The smoke in the stop-motion animation (2m15s) was made with cheesecloth!



## S14 Scholars

Guess what! Archamella™ is illustrated in relation to the sun! Each exterior panel reflects a quality of light from one of 4 times of day. Using clues from shadows, and the temperature of the light, can you match each panel to a time of day?

### TIMES OF DAY

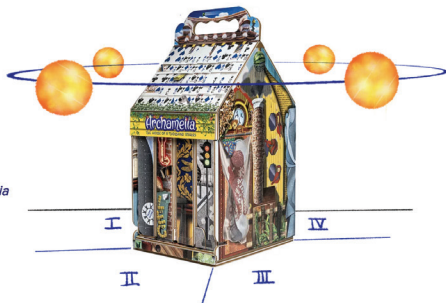
- Sunrise
- Noon
- Sunset
- Midnight

### PANEL OF HOUSE

- Rocket
- Treefort + Solar Garden
- Garage + Card Roof
- Shipboat

Once matched, figure out what direction the front of Archamella is facing - north, south, east or west.

WHERE IS THE SUN?



## E12 Explorers

Learn about how Earth moves around the sun, why there's a "dark side of the moon" and why it's not technically accurate to call it a "sunrise" or a "sunset."



## Solar Garden

Flip the lid of your Archamella™ to reveal the rooftop solar garden. Power your house and grow your own food!

### E12 Explorers

Locate all the objects listed below!  
Look closely, they can be anywhere!

- elephant x 3
- key
- gopher
- pumpkin x 3
- hippopotamus
- sun
- tomato plants
- Venus fly traps
- solar power flower x 4



## S14 Scholars

The solar garden tree can be seen elsewhere in Archamella™. Where? Have you ever painted with watercolors?

## C10 Creators

The image in the background of the solar garden is taken of Pasadena, California. This is where the inventor of Archamella™ would go to think creatively.

Build your own collage. Visit your favorite, most creative places. Take a thoughtful photo at the "right" time of day of each place. Print those photos and use them as a backdrop for your collage.

Complete the collage with additional images. These can come from magazines, photos or drawings. Cover the backdrops with all the things that make you feel confident, creative and silly.

Place your Creativity Collage near your desk. Whenever you feel tired, look at the images and remember what they mean to you. Surrounding yourself with beautiful and meaningful images helps cultivate inspiration.



## S15 Scholars

Weird! Some plants eat insects? Yup! There are 3 types of Insectivorous Plants: Active, Semi-Active, and Passive Traps.

The solar garden has *Dionaea muscipula*. But it has a much more recognizable name. HINT: It's also a planet.

Is this plant Active, Semi-Active, or Passive?

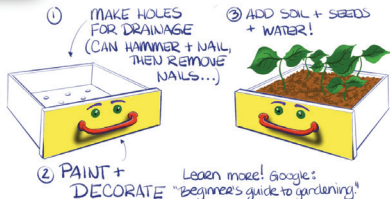


## T11 Storytellers

We are the SoFlyTraps, and we love singing in harmony. Write a story about our band, and the latest song we've sung.

## B8 Builders

Urban Farming rocks! DYK we "invented" agriculture 7,000 years ago?! Put some holes in an old dresser drawer, fill it with soil and seeds, water...and GROW!



## C11 Creators

This hippo was made with a single piece of faux-leather by using a thoughtful series of folds and cuts.

Here are a bunch of animals you can make on your own, with just a square piece of paper. Create them all and invite them into your next storied adventure!

You can also make animal friends with hand towels! Build some of these animals and stack them around Archamella™ as giants in the land of Imagistoria!

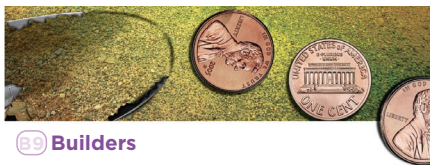


## E14 Explorers

Ever notice how the sun and moon appear larger when they are lower on the horizon? Learn about the Ebbinghaus Illusion to understand why.

Find your next full moon here. Just plug in the name of your city. On that night, observe the full moon when it's low on the horizon. Cut a piece of paper the same size when held at arm's distance.

Wait one hour, for the moon to change locations higher in the sky. Check it again! First, does the moon appear smaller than it was? Now check it with your piece of paper at arm's length. Is it the same size?



## B3 Builders

Build a penny path! Lay your Archamella™ on its "back" so that the unfolded roof rests along the ground. Then lay a handful of pennies in a path on the table.

Let your figurines skip and hop from penny to penny in and around the solar garden.



## Front Door

Fold the interior flap vertically, and latch the wings on the walls. Don't worry, the roof won't shut all the way.

## E15 Explorers

Locate all the objects listed below!  
Look closely, they can be anywhere!

- ladybug x 4
- beehive
- hen
- henhouse
- butterfly x 5
- mouse hole
- balloon x 10
- penny
- horseshoe
- snailmail

## E16 Explorers

There's a theme for this facade. It's what the plants, horseshoe, ladybug, butterflies, and penny have in common.

What is it?



## T12 Storytellers

Write a story about me and that piece of cheese over there, hiding underneath the shingle in this house of cards!

## E17 Explorers

What's missing?! There are 5 missing cards. One entire "crazy" set, and one more rogue card. Figure out the missing card.

Do you have a deck of cards? Learn these games and start a family card night! Or these magic tricks to impress the family at the next holiday gathering.

## C12 Creators

Create your own deck of cards! Collect a bunch of images from magazines and photographs and collage them to a piece of paper. Do this on 3 pages, covering the ENTIRE page each time.

Lay clear tape across ALL of the images. After, cut each page into 5 equal strips horizontally and vertically (about 1.7" x 2.2")

Now that you have a laminated collage deck of your favorite things, draw each of the cards on the flip side, from 2-10, J, Q, K, and A. Make sure to establish 4 different suits. Use the 3rd sheet for back-up in case you make mistakes.

Show a friend you care by making them a set too!

## S16 Scholars

Did you know the clay rooftop is from an image of a house in Bukchon Hanok Village, one of the oldest urban neighborhoods in Seoul, South Korea. It's more than 600 years old!

Notice the watermelon flying overhead? Where else can you find a watermelon on the walls of Archamella™?



## T13 Storytellers

People forget about me. "You're just a snailman!" But, imagine a world without me! Tell my story.

## E18 Explorers

Once you have located all 6 plants around the Front Door, identify them by name, and their native location.

**BONUS CHALLENGE:** What do these 6 plants have in common? Best of luck solving this one!

## S17 Scholars

Why do you think the crayon has that specific name for a color?

## E19 Explorers

There are seven 7's hiding around the Front Door. Make a wish, then find them all, and your wish will come true!



## S10 Builders

Locate the basketball net in the shadow against the front of the house. Use your creativity to build one of your own, using familiar materials from around the house.

With a flashlight, try to set up your DIY hoop where it needs to be in order to cast a matching shadow against the house.

## C13 Creators

Grab all your dolls and figurines and set up a basketball game in the driveway of your Archamella™! No need to build a second hoop... just play "half court."

Get with your friends and create a cheerleading squad too. Ra-Ra-Sis-Koom-Bot! We don't ever miss a shot!



## Fibo-Throne

Fold the door into a bench, turn the floaty into a cushion, and you have a throne fit for a "natural" ruler.

## E20 Explorers

Locate all the objects listed below! Look closely, they can be anywhere!

- antlers
- beetle
- boat
- bottle
- butterfly wings
- cork
- crab
- crown
- DNA strand
- egg
- fern bud x 2
- fire
- floaty
- gecko
- golden cord
- key
- maple leaf
- palm fronds
- paper straw
- pineapple
- pinecone
- raspberry
- sandwich
- seahorse x 2
- seashells
- shovel
- snail
- snake skin
- soda
- strawberry
- succulent
- sunflower
- top hat
- umbrella
- unicorn horn
- volleyball
- wheat
- wind blowing
- wings



## S18 Scholars

The throne is made of natural elements, including plants, fruits, animals and elements. On a piece of paper, use 3-5 words to describe features of each of these elements.

Afterward, circle the words that are used more than once. These are the qualities that are shared across these items. Guess what they ALL have in common? Answer further below.

## S19 Scholars

The throne captures elements of the plant and animal kingdoms. On the centerpiece of the throne is a beetle. Identify this crowning creature?

Once you figure it out, learn about its life cycle. It goes through four different transformational stages throughout its life!

## C14 Creators

With paper and colored pencil, draw out the lifecycle of the jewel beetle, including the environment that supports each one of these stages.

Use construction paper to make small models of each stage.

## E21 Explorers

Transformation is a part of nature. Just like caterpillars transform into butterflies, Archamella™ transforms into many new playsets. Complete the following visual transformations in the throne:

- The umbrella staff becomes a \_\_\_\_\_.
- The sand bucket transforms into a \_\_\_\_\_.
- The river floaty turns into a \_\_\_\_\_.

## T14 Storytellers

Make up a story that tells how I got this beautiful metallic shell.



## E22 Explorers

Learn about Leonardo Pisano Bigollo. What makes him famous?

That's right! He helped us understand the Fibonacci sequence. And that's what all the elements of the Throne have in common. Can you find the Fibonacci sequence in each of the elements?

## B11 Builders

Create your own Fibonacci spiral. You'll need some paper, a string, a pencil or pen, tape/glue, scissors, and craft supplies.

1. Cut out squares at the following dimensions:

- 0.75"
- 1.5"
- 2.25"
- 3.75"
- 6.0"

2. Tie a string to a pencil. On the largest square, hold the string firmly in one corner so that the pencil touches the next corner. Carefully draw an arc from one corner to the opposite.
3. Repeat this for all 6 squares (even the tiniest one!)
4. Lay the squares out in a spiral by first placing the smallest square on the table with the next larger square below so that the two arcs turn into one.
5. Take the third square, and place it to the left of the second, continuing the path of the arc.
6. Take the fourth square, and place it above the third.
7. Take the fifth square and place it to the right of the fourth.
8. You just made a Fibonacci spiral!

## S20 Scholars

The Fibonacci numbers are easy to remember. Learn more about them. That's how we get the "golden ratio," aka  $\phi$ . And this is just the beginning. Research how often  $\phi$  shows up in nature.

## E23 Explorers

Now that you know about Fibonacci numbers, start looking at the world around. How many examples of it can you find right under your nose?!

### ① Cut out SQUARES:

0.75"

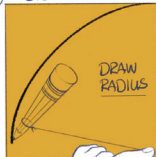
1.5"

2.25"

3.75"

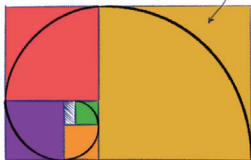


### ② 6.0"



\*NOTE: TRY TO KEEP YOUR PENCIL AS VERTICAL AS POSSIBLE!

### ③ LAY OUT SQUARES LIKE DESCRIBED AND SHOWN BELOW.



KEEP ADDING!! WHAT'S NEXT?

That's a Fibonacci Spiral!!



### T15 Storyteller

Let's tell a funny story with all the characters of the throne!

### S21 Scholars

Let's learn about the color purple! Why is it commonly associated with royalty? Maybe because it's so rare in nature?

Put on your Investigator hat and search for clues. HINT: It has something to do with a snail...

### C15 Creators

**RAINBOW NOODLES!** Have you ever tried to make dyes at home? Let's try it in the kitchen! Boil some shredded cabbage for 15 minutes. Strain the cabbage out and set the colored water aside in three different bowls.

At the same time, cook some spaghetti noodles for 2 minutes shorter than usual. Strain them and set them aside too.

Evenly distribute the noodles between the three bowls of purple water. Add 1/2 tsp of baking soda to one bowl. And squeeze lime into another. Stir and let sit for 20-30 minutes.

What color noodles did you make?!

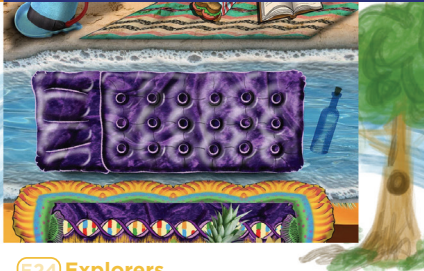
### B12 Builders

Place your Archamelia™ on butcher paper. Unfold the throne to reveal the Lazy River. With crayons, extend the river onto the paper, winding all about! Add trees and other features (even a buried island treasure!). Let the tropical adventure unfold!



### C16 Creators

Look! There's a message in that bottle! Open it up, what's it say? Create your own. Draw an encouraging message, roll it up and slip it inside of a clear glass bottle. Leave the bottle somewhere visible, like on a picnic table in the park. Wonder who will read your message, and what impact it might have?!



### E24 Explorers

There are three differences in the Throne when it is folded up and when it is laid flat. What are the three differences?

Ever wonder how antlers grow? Did you know they have fur in the beginning? And that they fall off every year, to grow anew again? Look online for more fun facts about antlers.

### B13 Builders

Inside Archamelia™, on the walls are instructions to fold this boat. Next time there is a rainstorm, race your boat with your friends in the neighborhood gutter.

Draw a boat and then try to make it with supplies from your home