



Cosmic Story Mat
Guide to Presentation

Cosmic Story Mat

(recommended for children 6 to 9 years of age)

Contents of Cosmic Story Mat:

- Guide to Presentation
- 48 x 32 “ canvas Cosmic Story Mat with storage bag
- 15 large storytelling cards
- Sequence cards (15 picture cards and 15 text cards)
- 12 Thumbprint Sequence Cards (numbered 4 through 15)
- 11 wooden timeline arrows
- double-sided control chart (with Cosmic Story Mat Timeline Arrow Control Chart and Cosmic Story Mat Thumbprint Sequence Card Control Chart)

Recommended:

Born with a Bang: The Universe Tells Our Cosmic Story

by Jennifer Morgan with illustrations by Dana Lynne Andersen

The Cosmic Story Mat was adapted from *Born with a Bang: The Universe Tells Our Cosmic Story*. Jennifer Morgan’s story and Dana Lynne Andersen’s illustrations beautifully capture the beginning of the universe and the timeline of events that followed to culminate in the creation of Earth, breaking it down into interesting and exciting developments that resonate with children in Primary classrooms. Our large storytelling cards allow you to engage the group in your storytelling and introduce the abstract concept of the Big Bang and the milestone events thereafter. Sequence cards encourage a child to revisit the story and match the text to the appropriate illustrations. Finally, wooden arrows and Thumbprint Sequence Cards challenge the child to track the events of the timeline on the Cosmic Story Mat independently.

** Please note that the text and image copyrights for these card materials belong to Jennifer Morgan (UniverseStories.com) and Dana Lynne Andersen (AwakeningArts.com) respectively in cooperation with the book’s publisher, Dawn Publications.*

First Presentation

You will need: large storytelling cards, Sequence cards.

Purpose: To spark the imagination with a story of how the universe began and to familiarize children with the sequence of events according to current scientific theory.

The following steps are meant to be introduced in separate sessions. Introducing relevant science experiments about the laws of the universe (like centrifugal force and gravity) are very helpful after the storytelling in Step 1 below.

1. Introduce the children to the concept of the Big Bang and the timeline of our universe by telling the story of the Big Bang using the large storytelling cards as visual aids.
2. Take out the sequence cards and have the children lay them out in order (if needed, they are numbered on the back for control of error). Have them read the text cards and match them to their corresponding picture cards. Place the cards on the shelf for further practice.

Second Presentation

You will need: Cosmic Story Mat, thumbprint pictures for timeline sequence, wooden timeline arrows, Cosmic Story Mat Timeline Arrow Control Chart, Cosmic Story Mat Thumbprint Sequence Cards Control Chart

Purpose: To reinforce the sequencing of the timeline of the universe after the Big Bang.

1. After the children are comfortable with the storytelling Sequence cards for the, take out the Cosmic Story Mat.
2. Explain that the mat shows a timeline of the universe in the shape of a spiral.
3. Show the children the explosion at the center of the spiral and name it the Big Bang.
4. Trace the spiral from the Big Bang out to Earth. Invite the children to join you in tracing the spiral.
5. Begin to trace the spiral again and note the small dot in its path. Explain that the dots along the spiral's path represent events.
6. Place the first arrow, *14 billion years ago*, pointing to the Big Bang. Then, following the dot's in the spiral's path, place the timeline arrows at the appropriate dots in sequential order, placing all of the arrows until you reach the Earth, *4 billion years ago*. Place that final arrow pointing towards Earth. (Feel free to use to the Cosmic Story Mat Timeline Arrow Control Chart for reference).
7. Introduce the Thumbprint Sequence Cards to match to the timeline arrows. (*Please note: The cards are numbered 4 through 15. Not all arrows have corresponding cards.*) The backs of the cards can serve as a control of error with numbering that corresponds to the matching storytelling Sequence card and the date of the appropriate arrow. The Cosmic Story Mat Thumbprint Sequence Cards Control Chart can also be referred to as a quick reference.

- Place cards 4, 5, 6 and on top of each other in rapid succession on the Big Bang (near the *14 billion years ago* arrow) to illustrate that these events happened in rapid succession.
 - Place cards 7 and 8 on top of each other near the *13 billion years ago* arrow.
 - Place card 9 near the *12 billion years ago* arrow.
 - Place card 10 near the *11 billion years ago* arrow.
 - Skip the *10 billion years ago*, *9 billion years ago*, and *8 billion years ago* arrows and place card 11 near the *7 billion years ago* arrow.
 - Place card 12 near the *6 billion years ago* arrow.
 - Skip the *5 billion years ago* arrow and place cards 13, 14, and 15 side by side near the Earth to show that these events took place over an extended period of time.
8. Place these materials on the shelf for independent work.

Extensions:

- Invite the child to tell you the story.
- Have the child illustrate and write the story in their own words to make a book.
- Have the children work together to each make a painting of a point in the story and describe what happened at that point in the sequence.



4 billion years ago



5 billion years ago

8 billion years ago

11 billion years ago

12 billion years ago

14 billion years ago

13 billion years ago

9 billion years ago

10 billion years ago

6 billion years ago

7 billion years ago

Cosmic Story Mat Thumbprint Sequence Cards Control Chart

