

Pi Day Activities

- with a focus on preschool, kindergarten, and early elementary level.
- some very easy concepts and activities near the top.

Most of the ideas and activities below are from the book **Circles** by Catherine Sheldrick Ross, Addison-Wesley, 1992. I culled the best ideas for very young children. Though, the book has great stories and activities for upper elementary students, as well. -KW

- Drawing circles with compass OR
Drawing circles with two pencils and string
- Circle prints
Slice fruits and vegetables that are round to use as stamps in paint
- Build a building or a town with only round blocks
- Use circle patterns, overlapping, to create petals of a flower
- Measuring circles, see page 10 of **Circles** by Ross book
Use string to measure around a circle (circumference) and across a circle (diameter)
Compare these measurements by putting 3 or 4 diameters together
- Make cone hats.
Start with a circle. Cut out a pie shaped sector. Fold and tape. Create flatter and pointier circles. See **Circles** by Ross, page 67 for measurements and ideas for a rice planters hat, a clown hat, etc.
- Create or color concentric circles
- Make bubbles
Make bubbles using a round piece of string (cotton and jute work well, but not nylon)
- Make “discs” related to cookies
Flatten round cookies
Slice discs from frozen cookies
Compare thickness of discs
- Folding circles, drawing lines and grids
Mark lines for half
Mark lines for cutting into 4 (uneven) slices
Make a grid with 3 lines crossing 3 lines, and then create shapes like triangle, square, and hexagon
- Play marbles
- Create or play with tops
- Create or play with wheels
- Roll various size balls. Compare also to rolling other shapes such as rectangles and triangles

-Turn yourself into a circle

Make a snow angel, and then trace around the outside edges to create a circle

Spin like an ice skater or ballerina

-Space test

“Put a penny on the table. How many other pennies can you fit around the first penny, touching it? Do you get the same answer if you try this space test using dimes? How about quarters?”

-Memorize Pi

How many numbers in the value of Pi can you remember.

Pi is an infinite decimal, here are some of the first numbers:

3.1415926535897932384626433832795028841...971693993751058209749445923078164062862089
9862803482534211706798214808651328230664709384460955058223172535940812848111745...

(The **Circles** by Ross book has an incorrect digit. Above is the correct sequence for Pi)

-Make a Moebius strip with paper

It's a thin, belt of paper, with one half twist. See **Circles** by Ross, page 13

-Make a sundial, or activities with a sundial. See **Circles** by Ross, page 34

-Blow bubbles into a glass of liquid

-Blow bubbles into liquid/paint and create bubble cluster art. See **Circles** by Ross, page 4.

-Use paper plates and other objects to create flying frisbees.

Use two paper plates to make a Super Flyer. One uses whole plate. Taped to another using only rim of plate. See **Circles** by Ross, page 55

-Create or play with cylinders

-Count the age of trees by using the concentric circles

-Party spiral

Draw a circle. Draw a spiral from outside, around and around until the middle. Cut. Loop a thread threw the middle piece inside circle.

-Plant a sunflower

-Create or play games with circle mazes

-Circle Races

Use a wide, smooth board, such as a piece of plywood to race various circle, disc, and round shapes. Examples: A metal washer, a nickel, a marble. (The washer will not roll as fast, because of the way its weight is spread.) See **Circles** by Ross, page 76

-Compare sitting at a rectangular table and a round table. Sitting at a round table, there is no first and last or head of the table. / Recreate King Arthur's Knights of the Round Table.

-end