

# $\pi$ Day Scavenger Hunt

## Teacher Notes

In this scavenger hunt, students work through 8 problems in pairs or trios. Post the papers around the room, being sure to mix them up and NOT post them in the same order as they appear in the file.

Students can start at any station and the answer to the multiple-choice question will dictate where they go next. For example, the correct answer to the card that says **N** at the top is answer "U." Therefore, students now go to the card that says **U** at the top and answer the next question. Students know they are finished when they get back to the paper where they started.

Students should keep track of their work on a scrap piece of paper and also record the letters of each station in the order that they visit them.

This will make it easy for you to check their work. The correct order of stations should spell N-U-M-W-O-R-K-S. Since students can start at any station, their answer might start at a different letter and loop around (example: ORKSNUMW would be a correct solution)

Order of answers:

# NUMWORKS

(starting anywhere and "looping" around from S back to N)

(The answer to the **N** card is **U**, the answer to the **U** card is **M**, the answer to the **M** card is **W** etc.)

# N

Earth has a diameter of 7,926 miles.  
Approximately how many times could the Nile  
River wrap around the earth's circumference?  
*(Hint: the Nile is 4,130 miles long.)*

If this is  
the answer

Go to

## M

1.9 times

If this is  
the answer

Go to

## R

2 times

If this is  
the answer

Go to

## O

4.5 times

If this is  
the answer

Go to

## U

6 times

# U

Which circle has the biggest circumference?

If this is  
the answer

A circle with a diameter  
of 10 inches

Go to

**W**

If this is  
the answer

A circle with a diameter  
of  $5\pi$  inches

Go to

**R**

If this is  
the answer

A circle with an area of  
 $64\pi$  square inches

Go to

**M**

If this is  
the answer

A circle with an area of  
100 square inches

Go to

**O**

# M

Pepe's Pizza Parlor sells 16-inch diameter pizzas where each slice has a central angle of  $30^\circ$ . The Pizza  $\pi$  Factory sells 8-inch diameter pizzas where each slice has a central angle of  $60^\circ$ . A slice at Pepe's Pizza Parlor is \_\_\_\_\_ as a slice at the Pizza  $\pi$  Factory.

If this is  
the answer

Go to

## W

twice as large

If this is  
the answer

Go to

## O

half as large

If this is  
the answer

Go to

## K

the same size

If this is  
the answer

Go to

## S



four times as large

# W

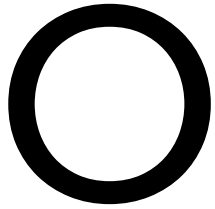
Let  $P$  = the atomic number of Phosphorus  
and  $I$  = the atomic number of Iodine.

What is the value of  $P + I$ ?

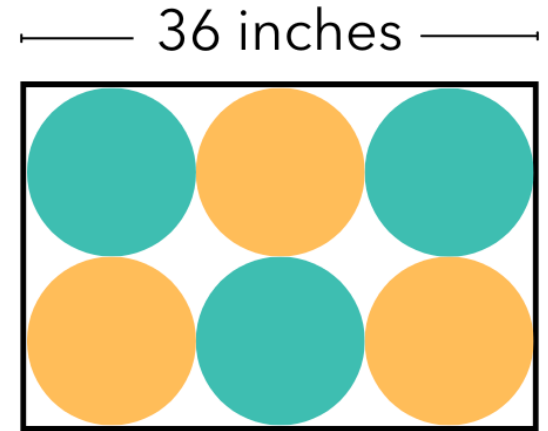
See the periodic table at [num.works/pi2](http://num.works/pi2).

Use the arrows to navigate the table, press  to  
see more info and  back out.

If this is the answer  Go to <b>N</b>	46	If this is the answer  Go to <b>O</b>	68
If this is the answer  Go to <b>R</b>	158	If this is the answer  Go to <b>S</b>	180



Six identical circles are enclosed in a rectangle, as shown. To the nearest tenth, what is the area of the unshaded region inside the rectangle?



If this is  
the answer

Go to

**K**

113.1 square inches

If this is  
the answer

Go to

**R**

185.4 square inches

If this is  
the answer

Go to

**N**

617.4 square inches

If this is  
the answer

Go to

**U**

678.6 square inches

# R

The tide at Carolina beach can be modeled by the function graphed at [num.works/pi1](https://num.works/pi1). The  $x$ -values measure the time in hours and  $f(x)$  gives the height of the tide, in feet, at time  $x$ .

Using the graph, how many hours are between two high tides?

Use the arrow keys to navigate the graph.

(The function used to model the tide is  $f(x) = 2.5 \cos\left(\frac{\pi}{6}(x - 3)\right) + 3$ .)

<p>If this is the answer</p> <p>Go to</p> <p><b>U</b></p> <p>3 hours</p>	<p>If this is the answer</p> <p>Go to</p> <p><b>M</b></p> <p>5.5 hours</p>
<p>If this is the answer</p> <p>Go to</p> <p><b>K</b></p> <p>12 hours</p>	<p>If this is the answer</p> <p>Go to</p> <p><b>S</b></p> <p>15 hours</p>

# K

A circle with an area of  $289\pi$  square centimeters is cut in half along the diameter. What is the perimeter of one of these halves?

If this is the answer

Go to  
**N**

$$17\pi$$

If this is the answer

Go to  
**U**

$$34\pi$$

If this is the answer

Go to  
**W**

$$34\pi + 17$$

If this is the answer

Go to  
**S**

$$17\pi + 34$$



# S

Below are the diameters of 7 disks, in centimeters. What is the average circumference of the 7 disks?

$\{1, 2, 2.8, 4, 5.1, 6.5, 8\}$

If this is  
the answer

Go to

**M**

4 cm

If this is  
the answer

Go to

**N**

13.2 cm

If this is  
the answer

Go to

**O**

4.2 cm

If this is  
the answer

Go to

**W**

12.6 cm

