Moments in Time

BUILD YOUR OWN SAND TIMER

Materials (to make one per child) Note: You can do this a variety of ways. Each child can make one to take home. Or you can supply a variety of pairs of jar/bottle sizes and each table can work on one (or more); then reuse the supplies for the next group of kids.

Baby food jars, clean and dry, 2 per child
OR Small plastic water bottles, 2 per child
OR Pairs of jars or bottles in different

sizes

- Card stock, amount varies depending on the size of jar used
- Pencils, several per table
- □ Scissors, several per table
- Funnels, several per table (or use rolled paper)
- □ Small hole punch, 1 per table
- Play sand, ½ cup per child (individual timers) or several cups per table (group timers)
- □ Electrical tape, 1 roll per table
- □ Timer, 1 per table
- □ God Thought of It First cards (11-6-079), 1 per child

Pre-Prep

- 1. Ensure the jars are clean and dry inside and out (with labels removed).
- 2. For younger children, you may want to trace around the lip of the jar and cut out the circle from card stock. Hole punch a small circle in the middle. Older children can do this during class.

Class Time Directions

At *Time Lab*, we've been talking about time!

Do you remember who created time? Yes, Jesus did. Jesus is our Creator and he created the very existence of time. Read Genesis 1:1. "In the beginning" shows us that there is a beginning to time and that Jesus created it. And then Jesus created the sun to mark off the daylight portion of our day, and he created the moon to mark off the night portion of our day. Read Genesis 1:14–19. The purpose of the sun, moon, stars, and planets is to bring glory to God and help us tell the passing of time.

Since the beginning, people have used a variety of ways to help tell the time. Some people made marks on the walls of caves to keep track of how many days had passed. Other people used the moon to keep track of how many days passed. They knew the moon went through phases every 28 days, so they were able to tell how many days had passed based on which phase the moon was in. In some stories, we might read about Native Americans who would say, "Many moons ago...." They were using the phases of the moon to keep track of time.

The position of the sun in the sky (as a result of our earth rotating on its axis) helps us know what time it is during the day. And our revolution around the sun marks off the years. The stars can also help keep track of the passing of time.

There are lots of ways today that we can tell what time it is. Can you think of any? Take responses: calendar, watch, digital watch, clock. When we want to know what day it is, we might look at a calendar. It shows us the days in a week and the weeks in a month. How many days are in a week? Take responses. Yes, seven. That comes from the very beginning, when God created all things in six days and then rested on the seventh. He established the seven-day week for us.

When we need to know what time of day it is, we may look at a watch or clock. And when we need to know how much time

has passed, we may use a timer. Today, we're going to explore a way we can use to mark and tell time.

At this moment in time, we're going to make a timer using sand and jars.



Get two jars of equal size. Trace around the lip of one on the card stock and cut out the circle. Punch a hole in the middle. Using a funnel, fill one jar ¾ full of sand. Place the circle on top of the jar and invert the other jar over it. Tape around the necks to hold them in place. Using a timer that measures seconds (digital phone timers work great), see how long it takes for the sand to completely drain from one jar to the other. Do this three times to ensure accuracy. Compare your timer to a friend's timer. Do your timers measure the same amount of time? What would make a difference? As time allows, take off the tape and add or subtract sand. Then reassemble. How does this change the amount of time your timer measures? How does changing the size of the hole in the card stock change the amount of time your timer measures? Depending on how big the jars are and how much sand we include in them, we could use a timer to mark an hour, five minutes, one minute, thirty seconds, or any amount we wanted. In a museum in Japan, there is a sand timer that takes exactly one year for the upper part to empty into the lower part. That's a lot of sand and a big timer!

Pass out the God Thought of It First lotus leaves cards, 1 per child.