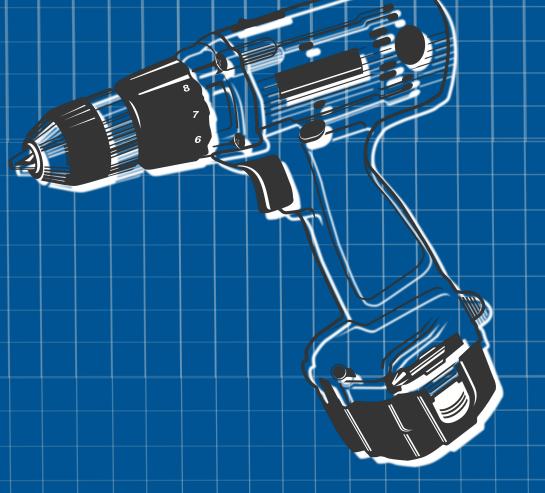
# OBJECT LESSONS



## HEAVY WEIGHT

### **Materials:**

- Bucket
- Weights

### **Procedure:**

- I Fill teach bucket with weights or heavy items.
- 2 try to carry just one, then two, then all three.
- 3 Try to walk with them all.

### Results:

We took three buckets and labeled them "Betrayed," "Set-Up" and "Forgotten." Inside of the buckets, we placed weights or dumbells. As each sin popped up in Paul's life add a bucket for your SPARK to carry. Then, try running and even just walking. Not easy. It is clear that carrying that weight made life difficult. However, when Paul let go of his hurts and forgave, take each bucket away. The load lightened as Paul let go of the pain. Walking, running or jumping was now no problem at all. It's a reminder of how sin weighs us down.

BIBLICAL EXAMPLE: Paul was a man that betrayed, set-up, and forgot many people in his time. Paul was heavy burdened in sin, but with Christ our sin burden is gone. When we repent, and follow Christ, our burdens are light because of Jesus taking our sin. We are not a people that carry around heavy weights.

FOR OLDER CHILDREN: Scientific Understanding.

The reality is that the Gospel is a mystery. We will never fully understand it, but what we know is that the only way to lighten our sin is be giving it to Christ. It doesn's make scenitific sense, but that is why having faith and hope in Christ outweighs what makes sense.

DAY I

## SOAPY PEPPER

### **Materials:**

- Shallow bowl or pie tin
- Water
- Pepper
- Dish soap
- Toothpick
- Paper
- Pencil

### **Procedure:**

- I Fill the bowl or pie tin with about an inch of water.
- 2 Sprinkle pepper evenly across the surface. Try not to sneeze! The pepper flakes should float, not sink, upon the surface of the water.
- 3 Squeeze a tiny bubble of dish soap onto a clean counter.
- 4 Touch the tip of the toothpick to the bubble of dish soap. You'll want just a tiny amount of soap on the end of the toothpick.
- 5 Set the toothpick carefully aside and pick up your notebook and pencil.
- What do you think will happen when you touch your soapy toothpick to the water? How will the pepper flakes react?
- 7 Write down your best, often called a hypothesis, in your notebook.
- 8 Now poke the soapy toothpick into the water, right in the center of the tin.
- 9 What happens? Was your hypothesis correct?

### **Results:**

Most of the pepper flakes should have darted to the sides of the pan, and some of the flakes should have fallen to the bottom of the pan. It may have looked like the soap was chasing the pepper flakes away.

BIBLICAL EXAMPLE: Just like the soap cleans and wipes out the pepper, Jesus does that with our sin. God sent Him to do just that so that we can still have a relationship with God, our Father.

### FOR OLDER CHILDREN: Scientific Understanding.

The first question to ask is why the pepper flakes float. Why don't they sink or dissolve in the water? Well, pepper is hydrophobic, meaning that water is not attracted to it. Because of that, the pepper can't dissolve in the water. But why do the flakes float on top of the water? Water molecules like to stick together. They line up in a certain way that gives the top of the water surface tension. Because pepper flakes are so light, and hydrophobic, the surface tension keeps them floating on top.

The next question to think about is why the pepper shoots to the sides when soap touches the water. Soap is able to break down the surface tension of water—that's part of what makes soap a good cleaner. As the soap moves into the water, and the surface tension changes, the pepper no longer floats on top. But the water molecules still want to keep the surface tension going, so they pull back away from the soap, and carry the pepper along with them. Do you think soap is the only substance that can break down water's surface tension? Try conducting the same experiment but with olive oil or hair spray. Do you think the pepper flakes will react in the same way?

DAY 2

## PRAISE GEYSER

### **Materials:**

- Mentos
- Diet Coke
- Paper

### **Procedure:**

- I Cut a piece of paper so that it is as wide as a roll of Mentos.
- Wrap the paper around the pack of Mentos to make a tube. Use masking tape to tape the tube. closed. Remove the pack of Mentos from the tube.
- 3 Close off one end of the tube by cutting a little circle or square of paper and taping it to one end of the tube.
- 4 Open the pack of Mentos and place all of them in the tube.
- 5 Slowly and carefully open a new bottle of Diet Coke.
- 6 Place it on a flat area outside where it is OK to get wet with soda.
- 7 Put the open end of your tube of Mentos on the card and place it directly over the opening of the soda bottle.
- When you are ready, remove the card and let all the Mentos drop into the soda at once and quickly move out of the way.

### **Results:**

Bubbles and soda will quickly shoot out of the bottle in a high fountain.

BIBLICAL EXAMPLE: God is worthy of our praise. Just like the explosion that happens when the Mentos hit the Diet Coke, we should explode with praise to God.

FOR OLDER CHILDREN: Scientific Understanding.

The carbon dioxide molecules attach to the surfaces of the Mentos like they did in the cup of soda. All those Mentos in a lot of soda make a lot of bubbles that rise to the surface and push the soda out in a big woosh!

DAY 3

## DAY 4

### Back-2-Back

### **Materials:**

- Paper
- Marker

### **Procedure:**

- I Please paper on a partner while you place paper on a table.
- As the person drawing on the back draws, the person draws what they feel on the paper on the table.
- 3 Once the person is done drawing, see how accurate the copier was.

### **Results:**

Most of the pepper flakes should have darted to the sides of the pan, and some of the flakes should have fallen to the bottom of the pan. It may have looked like the soap was chasing the pepper flakes away.

BIBLICAL EXAMPLE: We can't trust what we feel many times in life. We have to trust in what God's Word tells us. Even though we may feel something, it might be completely wrong in what is actually happening in a situation.

## DAY 5

### SANDY HOUSE

### **Materials:**

- Sand
- Bucket
- Water
- Rock
- Block houses

### **Procedure:**

- I Make a sand castle with sand and bucket.
- 2 Place a block house on the sand and another on the rock
- 3 Pour water on the houses

### **Results:**

The house on the rock doesn't fall. The house on the sand falls with the sand

BIBLICAL EXAMPLE: When we build on faith untruths we fail like the house on the sand, but when we build our faith on the truh, the rock, God's Word, we will stand firm on that foundation.