Thank you, President Worthen, for the nice introduction. President Worthen mentioned that I graduated from the University of Utah. If that fact troubles any of you because of the long-standing sports rivalry, let me put your mind at ease. I recently received a very nice thank-you note from a graduating student. After saying lots of nice things, he concluded his note by saying, “Despite the fact that you graduated from the U, I think you’re a great guy.” So don’t worry: I am a great guy, and I am thrilled to be here at BYU with so many great students and colleagues. I hope each of you feels that way too.

The World Is a Dangerous Place

Last week I had a great time with my son Tate and the rest of the priests and teachers from our ward on their annual high adventure trip. Among other things, we kayaked on the Green River and mountain biked in the La Sal Mountains. One of the highlights of the trip was rappelling down a 175-foot cliff below a double arch. Don’t get the wrong impression; I am not a great adventurer and I am definitely not an experienced climber. I have always had a fear of heights, and before last week I had never rappelled. As I started the descent, the engineer in me started to think about how ropes can fray and carabiners can break. I know my fears were irrational, but there is some inherent danger in rappelling. Maybe a little healthy fear is a good thing if it helps me stay safe.

Rappelling isn’t the only dangerous thing in the world. In fact, the world is basically a dangerous place. Here are some numbers from an article I read some years ago that illustrate what I mean:

- You have a one in 11 million risk of dying from an earthquake or volcano.
- There is a one in 12 million chance you will die from leaking gas.
- You have a one in 6 million probability of being injured in an elevator ride.
- There is a one in 23 million chance that you will die from drinking detergent.
- Your risk of being infected with flesh-eating bacteria is one in 170,000.
- You have a one in 11,000 chance of being murdered, a one in 400 chance of being robbed, and a one in fifty chance of being burglarized.

Mark B. Colton was an associate professor in the BYU Department of Mechanical Engineering when he gave this address on 30 June 2015.
• Certain risks depend on where you are born. For example, in the United States you have a one in 100 chance of dying before the age of five. In South Asia, on the other hand, you have one chance in eight.
• Other risks have to do with whether you are a man or a woman. For example, men are 2.3 times as likely to die in a car crash and 3.3 times as likely to accidentally poison themselves than are women.
• Women in the United States, on the other hand, have a one in 12,500 chance of dying in childbirth.
• I’m sure some of you have wondered this: what are your chances of being struck by lightning this year? The answer is one in 750,000.
• And, finally, a piece of good news: What are the odds that you will be hit by a meteor? Only one in 150 trillion.1

The dangers are real, and they make me worry. Anyone who has sent a daughter to her first day of school, dropped a son off at Scout camp, or given the car keys to their teenager for the first time knows what I am talking about. In preparation for all the dangers in the world, I want to sit my children down and tell them to look both ways before crossing the street and to chew their food carefully. I want to warn them to always wear their seatbelts and to check their blind spot. I want to tell them to not talk to strangers and to avoid volcanoes. I want to urge them to play tennis instead of football. I want to warn them of the danger of drinking detergent.

There is one danger that is not listed here that worries me most of all. I would like to talk about it today.

The Great Danger

A few years ago one of my colleagues came to my office to tell me some sad news about a mutual friend. He told me that our friend had chosen to leave the Church because he no longer believed it was true. I couldn’t believe what I was hearing. My friend was a strong member of the Church, a returned missionary, a well-educated person from a good family, and someone who had served in positions of responsibility in the Church. And he was throwing away something that used to be precious to him.

I was surprised by how hard I took the news. I was shocked and saddened, and my mind kept returning to my friend and his family. I wondered how this could have happened. How was it possible that someone who at one point had a bright testimony of the gospel and had shared it with others was leaving the Church because that testimony was gone? In my mind it was a tragedy, and it affected me deeply. I am sure some of you have been deeply affected as someone close to you has lost their way and their faith.

This is the danger that I worry about: losing one’s testimony, whether through a crisis of faith or through a slow, subtle decline. Closely related to it is the danger of “just getting by” with a testimony that is inadequate or incomplete. I know that each of you will undoubtedly face challenges to your testimony, and the danger is very real.

Although I view what happened to my friend and to others like him as a tragedy, this experience has resulted in one positive outcome for me. It has made me think about my own testimony and reexamine what I believe. I have looked carefully at what I am doing to keep and strengthen my testimony, and I have made changes. The result has been great. As I have done those things that I know I must do to gain the kind of testimony that I want, I have felt the Savior’s love for me, and my testimony of Him and of the restored gospel has grown. My knowledge is still imperfect and incomplete, but it has been exciting to feel it grow from something that was good into something that is much better.
What I want to share today is not just for those whose testimonies are at the point where they are considering leaving the Church or have already decided to do so. I assume that most people listening today are not in that category, but maybe some are. I also want to direct my comments to those whose testimonies are not as strong as they should be or want them to be; to those who struggle with doubt or wonder about certain doctrines; to those whose questions prevent them from being able to declare with confidence that they know the Church is true; to those who go through the motions of Church membership for family or cultural reasons but haven’t felt the warmth of a testimony for some time; and to those who maybe find their belief and faith slowly drifting away and want to have them back. My thoughts today are also for those people who, like me, want their testimony to be stronger and want to avoid the danger of letting it die.

**Fight for It**

If I had to summarize in one sentence the key to keeping and strengthening your testimony, it would be this: You have to fight for your testimony.

There are many things we are willing to fight for. Who has been willing to go to battle, figuratively, for something they wanted badly? Who has put in long hours of hard study to get a needed grade on a final exam? Who has practiced diligently and passionately to master a sport or a musical instrument? Who would put up a fight if someone were trying to steal something of value from them?

Your testimony is your most valuable possession, and someone is trying to steal it from you. Can you imagine what your testimony would be like if you fought for it with the same tenacity with which you fight for other things in life?

I think there are two reasons why you need to fight for your testimony. First, you show your Father in Heaven how much you value your testimony and that you want to keep it. I believe He is more eager to give the gift of testimony to those He knows will cherish it, protect it, and fight for it.

The second reason is that those things that constitute a good fight are also the things that will naturally result in a stronger testimony. I am talking about prayer, study, fasting, and all of the tools that we already know to be key to gaining faith and knowledge. We all know that we need to be doing these things, but when it comes to growing our testimonies, it is not enough to just do them; we need to do them with purpose and focus and consistency. Doing them casually is not nearly enough when a testimony is in danger. If you are struggling with your faith and are not receiving the testimony that you want—despite prayer, study, and fasting—I urge you to not give up. Do these things with renewed vigor. Make it a true fight. I feel very strongly that our Father in Heaven will reward those who fight for their testimony.

Elder Jeffrey R. Holland, who has said many great things about faith and testimonies, said, “In moments of fear or doubt or troubling times, hold the ground you have already won, even if that ground is limited.” He went on to say, “Hold fast to what you already know and stand strong until additional knowledge comes.”¹ Fight for the testimony that you have, and your testimony will grow.

**There Is Only One Source of a True Testimony**

The next key should be obvious to everyone: our Heavenly Father, through the Holy Ghost, is the only source of a true testimony. Moroni promised that after doing your part to obtain a testimony, Christ “will manifest the truth of it unto you, by the power of the Holy Ghost. And by the power of the Holy Ghost ye may know the truth of all things” (Moroni 10:4–5). No matter how impressive your learning, mastery
of the scriptures, life experience, or logic and reason, only the Holy Ghost can impart the kind of testimony that lasts. You need to turn to God for confirmation of the truth.

There Are Many Sources of Falsehood

There is a corollary to that last statement: although there is only one source of a true testimony, there are many sources of falsehood.

About eleven years ago our twins, Max and Mia, were two years old and we were living in an apartment while I was in graduate school. To my wife’s horror we discovered that there was a mouse in our apartment. We bought a mousetrap, put some peanut butter on it, and placed it next to a baseboard on the kitchen floor where we had seen the mouse. Two-year-olds and mousetraps don’t coexist very well, so we took Max and Mia into the kitchen, pointed out the mousetrap, and explained to them how dangerous it was. We told them to stay away from it, to keep their fingers out, and that it would hurt them. We even used our scary voices: “No. Don’t touch. Danger.” A couple of days later, while most of us were sitting on the couch in the other room, we heard a snap and then a scream. We hurried into the kitchen and found little Mia with her fingers in the trap and peanut butter on her lips.

Bothers and sisters, there are many sources of falsehood in the world. Please don’t put your fingers in those traps. Don’t turn to them in your quest for a testimony. There have been, and always will be, intelligent and articulate people in the world who will try to convince you that the Church is not true, that God does not exist, and that anyone who believes that there is a God is foolish and naïve. Don’t go to those sources. Don’t turn to people on the Internet who are seeking to destroy your testimony. Like with our twins, I want to point at those traps and tell you how dangerous they are. I want to tell you to stay away from them, to keep your fingers out, and that they will hurt you. I want to use my scary voice: “No. Don’t touch. Danger.”

You would never turn to an engineering textbook to learn accounting or play basketball to prepare for a final exam. It just doesn’t make sense. Turning to other sources for understanding or to gain a testimony makes even less sense. Don’t do it. It will open the door to deception and confusion.

Some may think that if the Church is true then their testimony should be able to stand up to anything that people can write about the Church on the Internet. Others might claim that we are told not to read such things because the Church has something to hide. These claims just aren’t true. It has never been a question of whether the Church is true or has something to hide; it is about the cleverness and subtlety of the adversary and his ability to deceive and confuse. He teams up with clever people who are very convincing. Together they always find exactly the right wedge to drive into the cracks in your faith. Please don’t put your fingers in those traps.

Choose to Believe

The next key to getting the type of testimony that you want is to choose to believe. Elder L. Whitney Clayton stated, “The decision to believe is the most important choice we ever make.”3 Some may say that this is a naïve approach to finding truth and that choosing to believe something won’t make it true. But that is not what we are asked to do. We know that choosing to believe is the first step toward knowing if something is true. The prophet Alma taught that we need to “exercise a particle of faith,” “desire to believe,” and let the desire work in us until we truly believe (Alma 32:27).

Elder Clayton emphasized the importance of choosing to believe. He said:

Belief and testimony and faith are not passive principles. They do not just happen to us. Belief is something we choose—we hope for it, we work for it, and we sacrifice for it. We will not accidentally come to believe in the Savior and His gospel any
more than we will accidentally pray or pay tithing. We actively choose to believe, just like we choose to keep other commandments.⁴

As part of choosing to believe, you need to suspend your doubts so that your faith and your testimony have a chance to grow. I am not saying that you need to pretend that your doubts or questions don’t exist; you just need to move them far enough to the side to be able to, as Alma said, “give place, that a seed may be planted in your heart” (Alma 32:28). As the seed grows into a strong testimony, your doubts and concerns will be pushed further and further to the side. They may not immediately go away, but the strength of your belief will render them insignificant until the day when all doubts and questions will be resolved.

Don’t Let Unanswered Questions Undermine Your Faith

We all have questions in life, many of which are unanswered. The next key to keeping your testimony strong is to not let those unanswered questions undermine your faith. When the friend I spoke about left the Church, one of the reasons he gave for not believing that the Church is true is that “the data don’t support it.” We naturally want to understand how everything fits together, how science and religion agree, or how Church history and secular history match up. We want facts. We want proof. We want data. I understand. I consider myself a scientific guy. I want to understand how it all works. But I can’t let what I don’t know destroy what I do know. My scientific side, as important as it is, can’t dominate my spiritual side.

Regarding questions of faith, Elder Holland said, “In this Church, what we know will always trumps what we do not know. And remember, in this world, everyone is to walk by faith.”⁵ This statement tells us two things: first, we do know quite a bit about how things fit together, and second, for those things that we do not know, we are just going to have to get by on faith. This does not mean that we should stop thinking deeply and asking difficult questions. It is important for us to continue to ask questions, but we must do it using the enabling power of faith, assuming that answers will come, rather than under the stifling influence of doubt. I firmly believe that eventually all questions of science, religion, and history will be answered in full.

Sometimes I draw strength from the fact that there are a lot of intelligent, educated people who have amazing testimonies of the Savior and the restored gospel. I think of the testimonies of President Henry B. Eyring, Elder Dallin H. Oaks, and Elder Russell M. Nelson. They are educated, intelligent, and successful men, and they believe. I think of the testimonies of my friends, colleagues, and family. These people are smarter than I am, and they believe. I think about President Eyring’s father, one of the most important theoretical chemists of the twentieth century. He believed. He also nicely summarized the issue when he said:

> Some have asked me, “Is there any conflict between science and religion?” There is no conflict in the mind of God, but often there is conflict in the minds of men. Through the eternities, we are going to get closer and closer to understanding the mind of God; then the conflicts will disappear.⁶

Remember that there are answers and there are reasons. God knows them and will help you understand them if you don’t let the unanswered questions undermine your faith.

Experiment Upon the Word

The next key is to follow Alma’s counsel to experiment upon the word. In science and engineering fields, experiments are essential. Scientists perform experiments to understand phenomena, to test hypotheses, and to validate theoretical models. Experiments are designed to answer important questions.
Some of my best friends are scientists. Dave Thomson, in the Department of Physiology and Developmental Biology, conducts experiments that test whether caffeine affects the ability of skeletal muscle to grow when it is stressed. Matt Seeley, in the Department of Exercise Sciences, has conducted experiments in which he injects saline into a person’s knee to cause pain and then measures the change in the person’s gait in response to the pain. Without conducting these experiments, these men would never be able to know the answers to their questions.

My colleagues and I study how people interact with robots. In a recent project we worked with students and faculty from the Departments of Computer Science and Communication Disorders to explore how therapists can use robots to help children with autism. The therapists used a robot to engage the children in games, sharing activities, and songs with actions, such as “Popcorn Popping.” Although our results were not perfect, we found that for some children with autism, using robots can help them make improvements in important social behaviors.

What if we had dreamed up a robot but had never built it to see how it worked? Or what if we had built the robot but had never let the therapists use it in the clinic? Our work would have been useless. You can read all you want about a topic, you can think carefully about a research question, you can look at the theory and develop mathematical models, and you can even look at other people’s research, but until you try something out—until you get your hands dirty in actual experiments—you will never get a definitive answer for yourself.

The same is true for obtaining and keeping a testimony of the gospel: you need to experiment upon the word. Only by getting your hands dirty can you get a definitive answer for yourself. In the Book of Mormon Alma told of the Lord’s way of experimenting; you must desire to have a testimony, you must exercise what faith you have (even if it is very little), you must do those things that will make your faith grow, and then you must watch carefully to see if it grows (see Alma 32:27–33).

Experiments Are Hard
There is a problem: whether they are scientific or spiritual experiments, experiments are hard. They are so much work! It seems, at least initially, that they never go exactly as we plan. Sometimes this is because we are asking the wrong questions. Sometimes we are not following the correct procedure. Sometimes we are not patient enough, and we miss out on the beautiful results that would have come had we stuck with the experiment a little longer. Sometimes we need to repeat the experiment.

I teach a class called mechatronics that culminates in teams of students building and programming small robots to compete against other teams’ robots. This class is a lot of fun, but it can also be really frustrating. One of the frustrating things about it is the attention to detail that is required for circuits, motors, and sensors to actually work. Here is a common scenario in the mechatronics class: A student will come to me and tell me that a circuit he built is not working, even though he connected everything exactly like he was supposed to. We then proceed to figure out what is wrong, checking all of the connections in the circuit. At a certain point I will ask, “Did you connect the _____ to the _____?” He will say that he did not, because that connection didn’t seem critical. I will point out that the datasheet (a set of instructions for the circuit) says that that connection needs to be made. It is not an optional connection, and the circuit probably won’t work without it.

When it comes to experimenting upon the word to gain a testimony, you need to conduct the experiments in the Lord’s way. You need to complete all the required steps and make all the necessary connections to be successful. These steps include study, faith, prayer, and
fasting. There is no other way to gain a testimony. If you leave one of the steps out, you can't reasonably expect to gain the testimony that you want. It just doesn't work that way. If the results do not come right away, reexamine whether you are doing all the things that you need to do. Be patient. The Lord's experimental method works. He wants to give you an answer if you continue to fight your way through the experiment. Once again, don't give up.

Let me add that to receive a true and deep testimony of the gospel, you must live in a way that you can receive a witness from the Holy Ghost. President Eyring said the following about the effects of unworthiness on your testimony:

*One of the effects of disobeying God seems to be the creation of just enough spiritual anesthetic to block any sensation as the ties to God are being cut. Not only [does] the testimony of the truth slowly erode, but even the memories of what it was like to be in the light [begin] to seem . . . like a delusion.*

If there are things in your life that prevent the Holy Ghost from being able to provide this witness, please fix them as part of your testimony experiment. Then the witness will come.

**Share It**

The last key is to share your testimony—whatever stage it is in.

My wife and I recently went to Singapore with a group of BYU engineering students. What a great experience! While we were there, I had two nice experiences as a result of people sharing their testimonies. One of the highlights of the trip was attending church with the Clementi Ward. The members of the ward were so welcoming to us. What impressed me most was how they focused on sharing their testimonies. The youth speakers shared their testimonies. The adult speakers shared their testimonies. The bishopric and instructors shared their testimonies. It was refreshing to feel such a focus on testimonies. It strengthened my testimony, and I am sure it strengthened theirs as they shared them.

While in Singapore we also learned something interesting about Emily, our oldest daughter: she's really great at writing letters. Every night we would look forward to reading her lengthy emails, which were informative, detailed, clever, and sometimes silly. She would tell us about what was going on at home and then tell us about each of her classes at school. On a number of occasions she wrote about what she was learning in seminary. She was studying the Martyrdom of the prophet Joseph Smith. In one of her letters Emily shared with us her feelings about the Prophet and about the ultimate price that he and Hyrum paid for the restored gospel. I can't tell you how good that made me feel. Although she might not have known it, she was sharing her testimony. It strengthened my testimony, and I know it strengthened hers. I need to be more like that. I need to find simple ways to share my testimony of the gospel. Maybe it will benefit others, and it will certainly benefit me.

**My Testimony of Testimonies**

Let me close with another beautiful statement by Elder Holland:

*I know this work is God's very truth, and I know that only at our peril would we allow doubt or devils to sway us from its path. Hope on. Journey on. Honestly acknowledge your questions and your concerns, but first and forever fan the flame of your faith.*

Brothers and sisters, I want to share my testimony of testimonies. I know that no matter where your testimony stands, our Father in Heaven wants to help you make it stronger. I know that whether you never had a burning testimony or have temporarily lost it, He can help you find it. Whatever the source of
your doubts or concerns, He can remove them. If you fight for your testimony and look to the only source of all truth, I know that you can have your own witness of the truthfulness of the gospel. In the name of Jesus Christ, amen.

Notes