



Making the Character Connection with...

Aerospace

Being a person of good character means you follow the Six Pillars of CharacterSM everyday. As you work through the Aerospace project think of all the ways being a person of character relates. You will learn about many different people who work in the industry, all of whom must follow their values and morals to succeed. For example, consider what could happen at a busy airport if just one person decides not to come to work and doesn't notify their boss. Can you imagine what might happen if one person cuts corners by not using all the bolts required to hold a rocket together? You will also learn how to teach others about the skills you have learned. Regardless of what you are doing in your project there is an opportunity to demonstrate you are a person of character, following your own moral compass. Think about these times as you go through your project and consider all the ways you can share your knowledge with others.

This Character Connection contains:

- **Explanation of the Six Pillars of Character.**
- **Explanation of how the Six Pillars of Character relate to the Aerospace project.**
- **Activities suggesting how to demonstrate good character while enhancing your Aerospace knowledge.**
- **Questions to help you think of other ways to demonstrate good character in everyday life.**

Character Connection: Aerospace

Trustworthiness	Responsibility	Caring
<ul style="list-style-type: none"> ✓ Always complete your part of the project ✓ Be honest with your project leader and your teammates ✓ Stand by your project, even if it doesn't work the way you wanted ✓ Don't cheat - claim only rockets that you really made or helped with 	<ul style="list-style-type: none"> ✓ Complete your project on time; remember, deadlines are a major part of Aerospace ✓ Work hard - Put out the best effort possible ✓ Do what you say you will do; be where you say you will be ✓ Do your part when working in groups 	<ul style="list-style-type: none"> ✓ Do what you're good at; others will appreciate your expertise ✓ Share your knowledge with others ✓ Be empathic - Share your tools and supplies if someone else runs low or has trouble with a rocket
Respect	Fairness	Citizenship
<ul style="list-style-type: none"> ✓ Judge people on what they can do, not just on who you are friends with ✓ Show respect for different views ✓ Value everyone even if they are not able to help you with your project ✓ Treat others' projects the way you want your project treated 	<ul style="list-style-type: none"> ✓ Don't try to change results of flight tests - Use them to make you better ✓ Allow everyone to speak before making group decisions. ✓ Be consistent in recording information 	<ul style="list-style-type: none"> ✓ Be a volunteer; help out whenever you can ✓ Play by the rules of your local clubs and fairs ✓ Don't use any supplies that are outlawed or not allowed ✓ Don't try to cut corners - follow the rules

Character Connection: Aerospace

Activity: Perseverance through History

DO:

Cornelius V. Loving was a determined pilot who flew planes even after having both of his legs amputated. He had to work very hard to finish college and design his own airplane. Cornelius Loving had perseverance; he did not give up and continued to reach for his goal of being a pilot, despite obstacles in his way. Sometimes when we are working on a project, like building rockets, it doesn't always come out right the first time. When we persevere we are able to finish the project and show it off with pride. Write a short story about a time you had to persevere in order to accomplish a goal. Share your story with your leader. Be sure to tell them who helped you make it to your goal and how it felt to finally finish your project.

REFLECT:

1. Did thinking back on past experiences help you to think about how you might change your response in the future?
2. Has there ever been a time when perseverance seemed like it would be impossible?
3. Do you think there are ways that you can help other people persevere when they are having a difficult time?

APPLY:

Persevering shows that we are determined and are willing to struggle a little to get to our end goal. Thinking back on times when we have been able to do this helps us to realize that things that may have seemed impossible were really possible with a little hard work and determination. People in history are not the only one who have persevered. How have your experiences caused you to persevere? Remember that we are all not so different and all face things that are challenging for us to overcome. Next time you or someone you know is facing something difficult, think of Cornelius Loving or the last time you persevered and remember that you will make it through.



Character Connection: Aerospace

Activity: Build a Machine

DO:

When we have a problem to solve, sometimes it helps to work with a team. Teamwork is one way we can get the opinions of others and work together to finish a task. In this lesson we learned about problem solving by finishing a maze with a mirror. Do you think this would have been easier or harder if you were working with a team? Now let's try this activity to see how important teams can be when completing a task.

Every person in your group is going to be a piece of a machine. As a team, decide what type of machine you would like to be. You can be anything you like, as long as you do something and everyone has a part. Practice your machine as a team so you know exactly what each person has to do to make the machine work right. Now, one person has to step out of the machine. What's going to happen? Will the machine work right? Have 2 people step out of the machine. Discuss how working, or not working, as a team helped or hurt your machine's success.

REFLECT:

1. When are some other times you have been asked to work in a team? How does it make you feel to work in team situations?
2. Have you ever seen a situation where one person can help or hurt a team? What does that do to everyone else in the team? Does their excitement change?
3. Can you think of a time you may have hurt a team you were in by something you did or said?
4. Brainstorm some other times when working in a team would be better than working alone.

APPLY:

Teamwork is an important part of life. There are some things we just cannot do without other people and there are other things we wouldn't want to do alone. While being able to get along is important, seeing how important each other's role is to the team's success is even better. Once everyone realizes that each member of the team is vital to the team's success everyone will treat each other with mutual respect. Next time you work in a team think of some ways you can contribute to your team's success. Maybe you can be the cheerleader or team leader, or maybe even the mediator if any disagreements come up. Remember, just like your machine, no team can truly be successful without the input and involvement of every member.

