

Spatial Awareness:

Knowing where you are in your space compared to your surroundings.

Agile:

Being ready and able to move quickly and easily.

Coordination:

Using your muscles together to move your body the way you want it to.

It's a NASA Fact:

During the first few days of space flight and after returning to Earth, astronauts experience a change in *spatial awareness* and may lose some sense of balance when they return to Earth. Research scientists from NASA's Neurosciences Laboratory closely monitor the crew members, who often report difficulty walking around corners and feeling like they are "tumbling" when they move their heads from side-to-side. Their brain has to relearn how to use information from their eyes, tiny balance organs in their inner ear, and their muscles to help control body movement. These problems are usually corrected after several weeks have passed and balance exercises are added to their fitness routine. Until then, they have to be extra careful; which means they may not be able to do some physical activities like fly a plane or drive a car.

MISSION COMPLETE: Test Yourself!

- ☐ Complete the practice of throwing and catching the tennis ball for 60 seconds without reaching your hand out to an object or touching your other foot down.
- ☐ Look in a mirror, or have another student watch you to check for accuracy as you practice this activity for improving balance and *spatial awareness*.
- ☐ Complete the balance game without losing your balance.



Improving your balance and *spatial awareness* will make you more *coordinated* and *agile*. It will decrease the chances of being hurt, or hurting someone else, due to a fall.

Think Safety!

- ☐ **While exploring, astronauts must watch out for rocks and craters in their paths to avoid tripping!**
- ☐ The area under your feet should be clear of all obstacles.
- ☐ Stay at least an arms distance from the wall and from others while doing this activity.
- ☐ Do not throw the ball too hard, nor use a ball that is too heavy.
- ☐ Remember that drinking plenty of water is important before, during, and after physical activities.

Mission Explorations:

- ☐ While standing still, stand on a soft surface and balance on one foot. Examples: towel, pillow, or cushion.
- ☐ Time yourself while trying to balance on two feet with your eyes closed. Open your eyes if you start to lose your balance.
- ☐ While practicing simple balance activities, you can also lift one foot to increase the difficulty.

Status Check: Have you updated your Mission Journal?