

SECRETS OF OLYMPIA

Want to know the secret to becoming an Olympian? Bring out your inner athlete and discover what makes you exceptional!



MATERIALS

- Wall
- Balloons or balls
 (basketballs, tennis balls, baseballs, etc.)

- Chalk or cones
- Description of the stations and explanations on the secrets of Olympia (see the following pages)

STEPS

- Set up the stations
 - There are three different test stations, and EACH YOUTH performs the challenges at every station (see the following pages for a description of the stations).
- 2 Prepare your group!
 - Divide the group into a maximum of three teams.
 - Explain to the group that they are en route to the Olympics, but first must discover the secrets of Olympia: How to jump higher, run faster, and throw farther!
- Carry out the activity
 - Each team positions itself at a different station and has **five minutes** to try the challenge. The teams then move on to the next station, and so on until each team has visited all three stations. There are no points to earn: It's all about having fun!

Psst! If you have a younger group, visit the stations one by one with your entire group.

4 Reveal the secrets of Olympia!

- Ask your group to guess what the secret is before revealing it (see next pages). Explain that they now know the secrets of Olympia and that they're ready to go to the Olympics!
- **Psst!** You can add the simplified scientific explanation shown in "quotation" marks.
- 5 Review the secrets of Olympia with your group
 - Do you already know the secrets of Olympia? Were you surprised?
 - Have you ever seen an Olympian or used one of their secrets?
 - What were the easiest/most difficult events for you? Which events did you like the most/the least?





- Draw a line on the ground starting from the wall.

 The wall will help you see the height of the jumps.
- Place yourself on the line and perform each of the jumps. Ask your teammates to compare the height of each jump.

Psst! Look at the feet to better see the height.

- **Jump no. 1** Place your two feet on the line and jump up without moving your arms.
- **Jump no. 2** Place your two feet on the line, swing your arms up and jump.

3 Remember which jump was the highest!

WANT TO DO MORE?

Perform this event with or without a running start. Back up a few steps and run up to the line before jumping up in the air.



JUMPER'S SECRET

To jump higher, swing your arms into the air and jump when your arms are above your head. Jump 2 should be the highest jump.

"In order to jump **very high, you need to push off the ground** as hard as you can. When you swing your arms up, your feet push on the ground, which lets you put more energy into your push off the ground and jump higher."



SECRETS OF OLYMPIA



- Draw a starting line and a finish line about five metres apart.
- 2 Position yourself at the starting line and perform the two sprints. Ask your teammates to compare the **starting** speeds.
 - **Sprint no. 1** Place **your two feet** on the line. Three, two, one ... Run as fast as you can to the finish line.
- **Sprint no. 2** Place your two feet on the line. Step back with your left foot, bend at the knees and lean **slightly** forward, placing your left hand on the ground in front of you. Move your right hand back. Three, two, one ... Run as fast as possible to the finish line.
- **3** Remember which **start** was the fastest!



SPRINTER'S SECRET

To start faster, lean forward!

The **start** of sprint 2, with its three-point technique (two feet + one hand = three points), should be the fastest.

"The secret to a **fast start** in the sprint is to propel yourself **forward** as fast as possible. When you start a sprint, your foot pushes off the ground to move your body forward. The farther forward you can lean, the greater your **forward thrust** will be. On the other hand, the more upright you are, the more your body will want to move upwards. The three-point technique lets you lean forward, which in turn allows you to propel yourself **forward** and start faster."



THE THROWER



- Draw a line on the ground to mark the starting position.
- Throw the ball three times in the same direction. Ask your teammates to mark the ground where each ball falls.

Psst! Always throw the ball with the same maximum force.

- Throw no. 1 Throw the ball as hard you can directly in front of you (the ball should not rise up into the air).
- Throw no. 2 Throw the ball as hard as you can, at a slightly upward angle (45°).

- Throw no. 3 Throw the ball as hard and high up into the air as you can.
- Remember which throw travelled the farthest!

WANT TO SEE MORE?

Perform the activity using other types of balls. Do you think the size, weight and shape of the ball will change the distance that it travels? What if you kick the ball?



THROWER'S SECRET

For greater distance, throw the ball at a slightly upward angle of 45°. **Throw 2** should be the one that traveled the farthest.

"The first ball was thrown too low, and since gravity pulls objects towards the ground, the ball doesn't

have time to make it far before it falls to the ground. The last ball was thrown too high. Its travel path was more vertical (upwards) than horizontal (forwards). The second ball was neither too high nor too low, so it travelled farther."

Psst! Explain the concept of gravity if your group are not familiar with it.

GRAVITY

What goes up must come down. Why don't you go flying into space when you jump? Gravity! It's invisible, a force that can't be seen, but it's always there to bring you back to Earth. Gravity DRAWS US down to the ground, and the same is true for ANY OTHER object on Earth.

