

Pelvic Clock®

# Exercises for Spondylolysis & Spondylolisthesis



# Spondylolysis

Spondylolysis is a stress fracture that generally occurs in the lumbar vertebrae L4 and L5.

Young athletes are usually the most susceptible to this injury, often due to repeated twisting (rotation) at the torso at high velocities, for example swinging a baseball bat.



## Spondylolisthesis

Spondylolisthesis, a slipping of a vertebra, can be of traumatic, congenital, or degenerative nature. While non-surgical treatment consists of physical therapy and a lumbar brace, more extreme cases require surgery.

A regular spinal stabilization exercise program not only aids in both prevention and recovery, but also helps minimize the risk of relapse.



A Home Exercise Program must include exercises that:

- Correct an abnormal anterior pelvic tilt.
- Stretch tight lower back muscles to relieve pain.
- Strengthen deep core muscles to stabilize your lumbar spine.

The Pelvic Clock® Exercise Device is for people dedicated to pursuing a regular exercise program to treat their chronic lower back pain and other related conditions.

Some people feel the effects of using the Pelvic Clock® device right away, especially after a long day of sitting. However, please keep in mind that it is not a one-off effort and in order to get the full benefits, you need to make pelvic clock exercises part of your daily regimen.

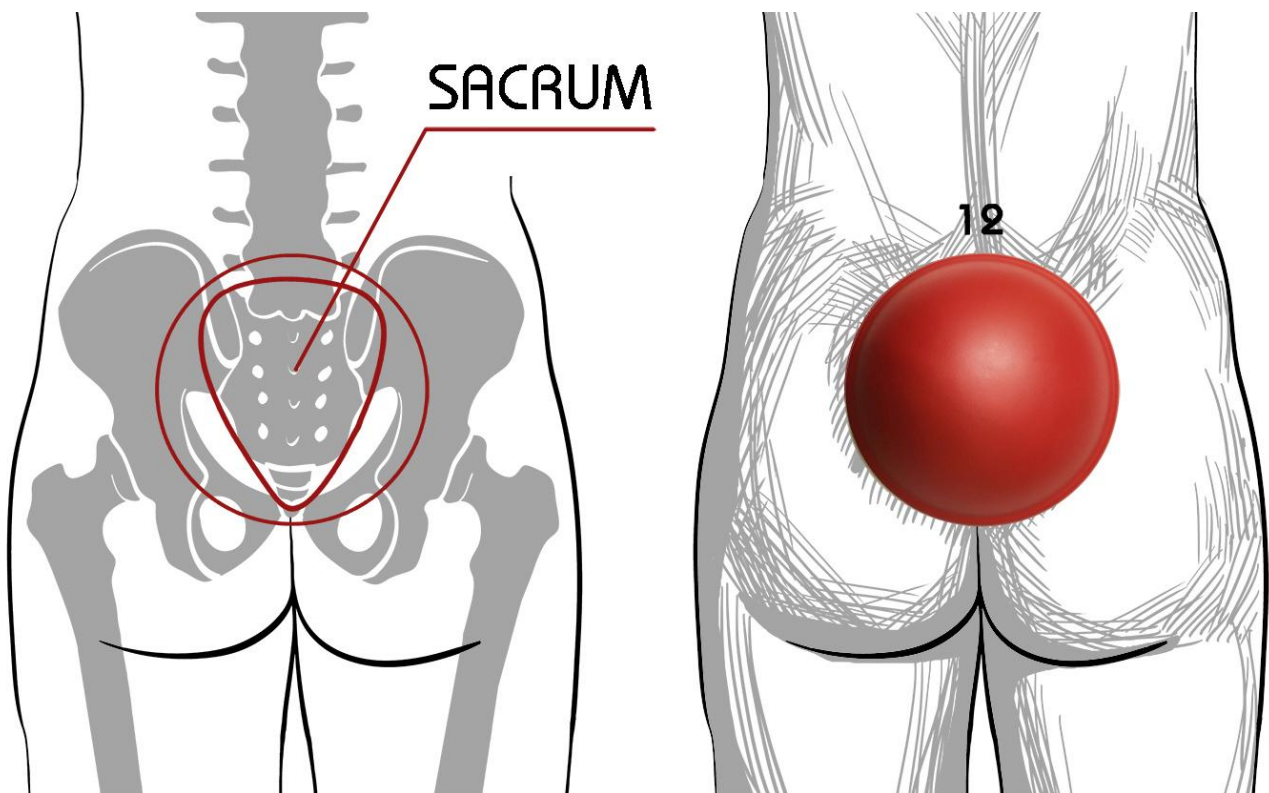
**TIPS:**

1. Start at a slow pace. Take time to build up your exercise routine. Take your time to stretch and decompress.
2. Listen to your body. When you are looking for pain relief, your own intuition and common sense can be very helpful. You need to find the direction of the movement that reduces your pain. If tilting your pelvis in one direction increases your pain, tilt it in the opposite direction.
3. If you are experiencing pain, stop your practice. Ice your lower back for 15 minutes, and give it a little rest.
4. Always exercise within your own limits. Gradually increase your range of motion until you are pain free.
5. In the first 2 weeks of your practice, you might want to use a small towel on top of the device for extra padding.
6. If your mobility is limited, start exercising on the bed or massage table. The soft surface will reduce the height of the device.

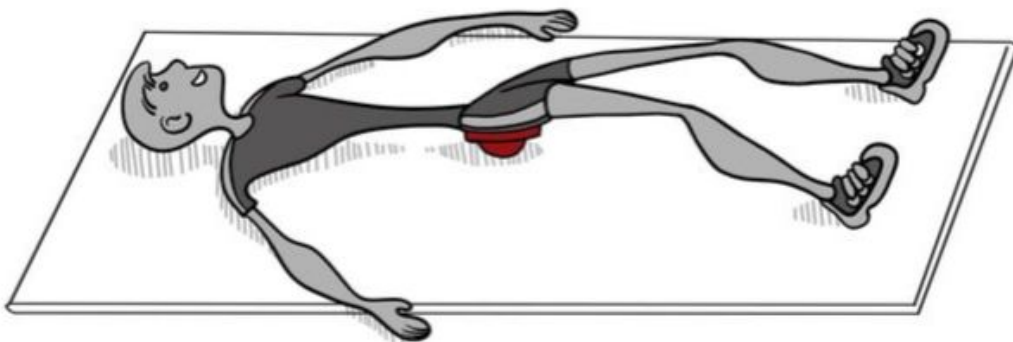
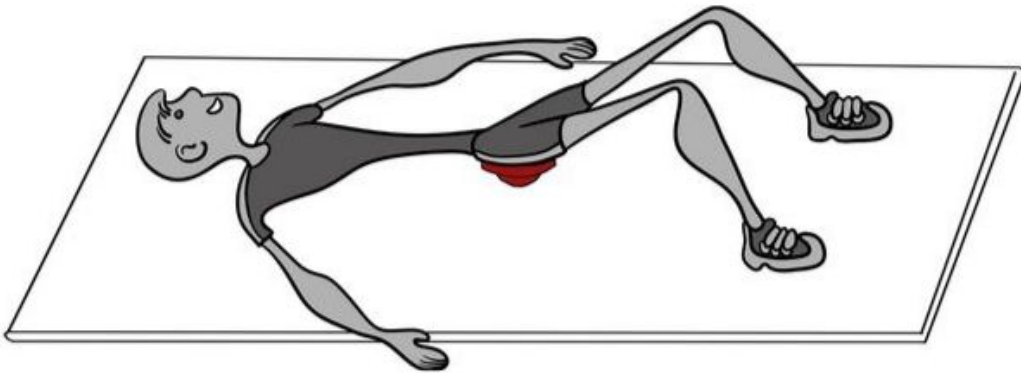
# How to Set Up For Exercises

Lie on your back with your knees bent and feet flat on the mat (this is called the semi-supine position). The feet should be hip distance apart.

Lift your pelvis about 1 to 3 inches off the floor. Then, place the device below your sacrum, between your sacrum and the floor. Lower your pelvis, and your sacrum should be sitting in the recess of the flat upper surface. The convex lower surface of the device stays in contact with the floor. Point the **12** o'clock marker on the device toward your head.

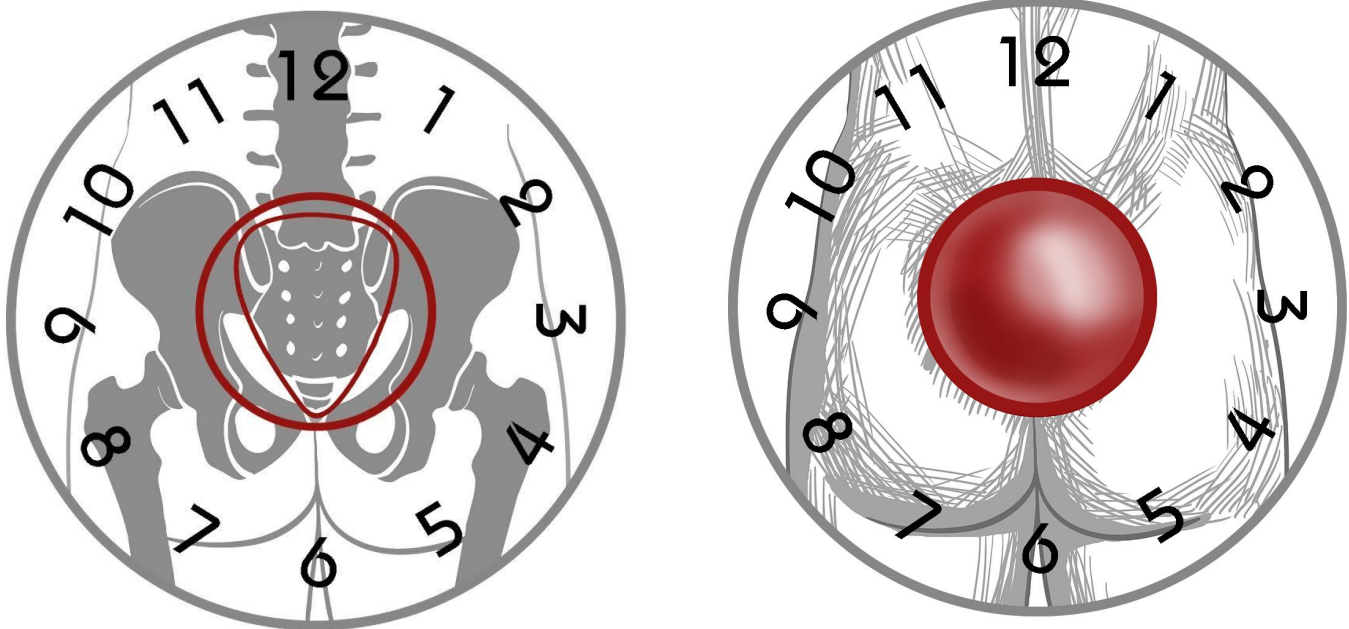


Once you have the device in position, you can just relax on it for a minute or two. Stretch out your legs on the mat or try rocking side to side.



# Exercise Patterns

In each exercise, your pelvis will follow a different pattern, using the numbers of the clock as a guide.



## Duration of Exercises

Aim to repeat each exercise 10 to 20 times. The number of repetitions and length of practice will vary for each person, depending on factors like affected side, physical condition, age, gender, and degree of pain. The goal is to perform all of these exercises within a range of motion that does not increase your pain and with the expectation that the device will help you to gradually increase your range of motion until you are pain free.



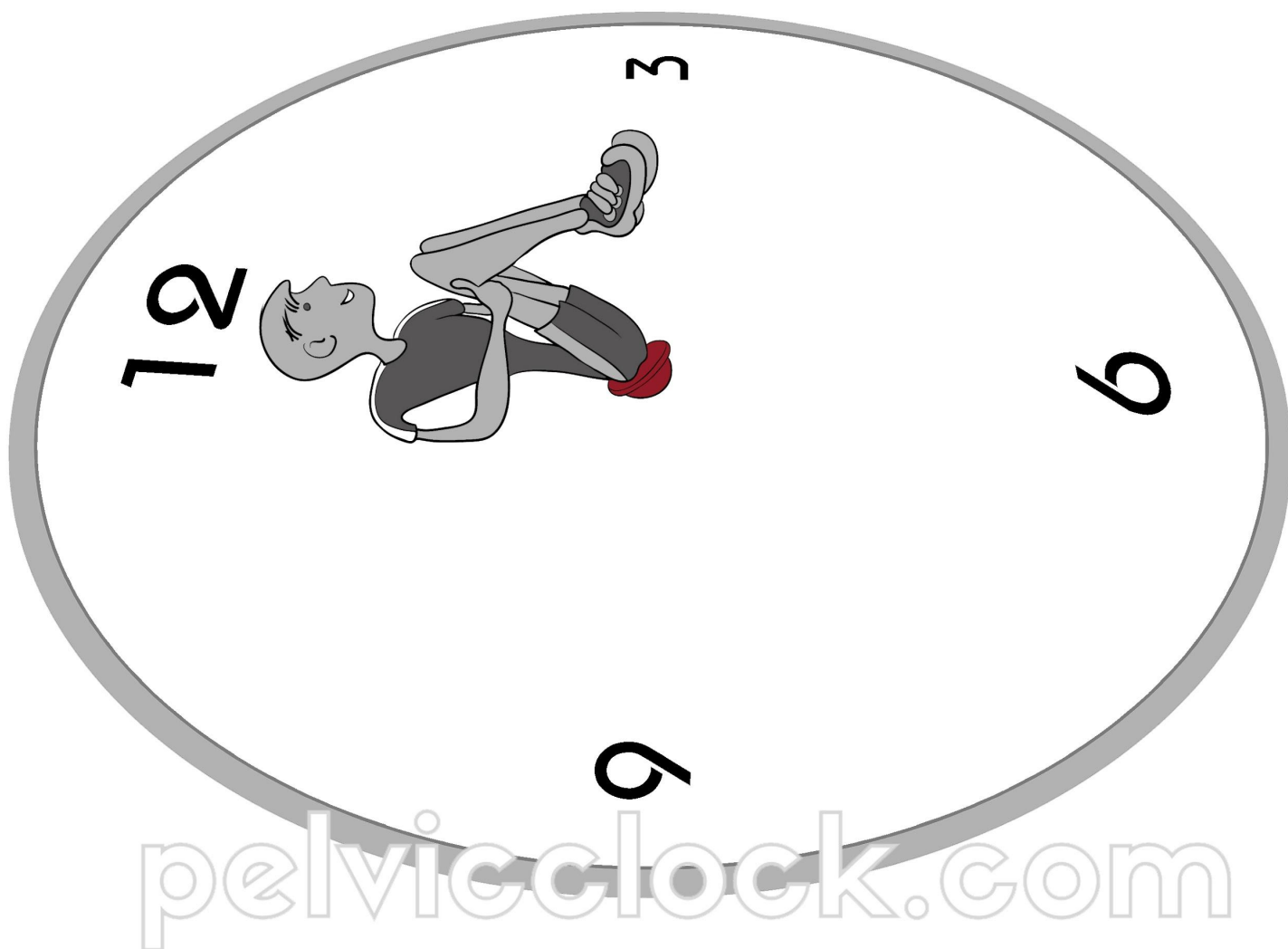
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# Stretches

# Knees-to-Chest Stretch

Pull your knees toward your chest.

Slowly rock your pelvis in different directions for 30+ seconds.

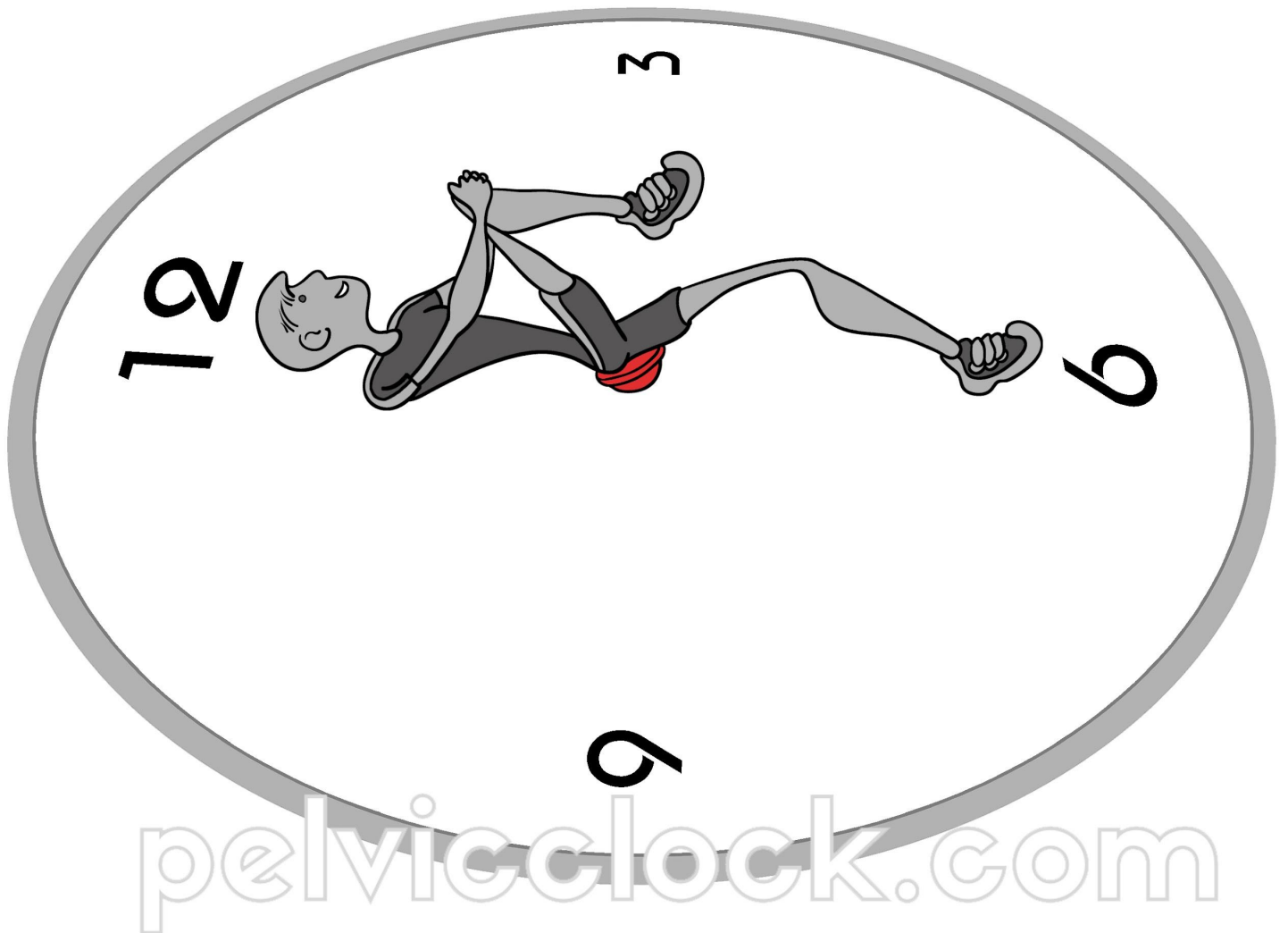


# Knee-to-Chest Stretch

Pull your **right** knee toward your chest. Stretch your left leg and relax.

Slowly rock your pelvis in different directions for 30+ seconds.

Then repeat this stretch with your **left** knee.



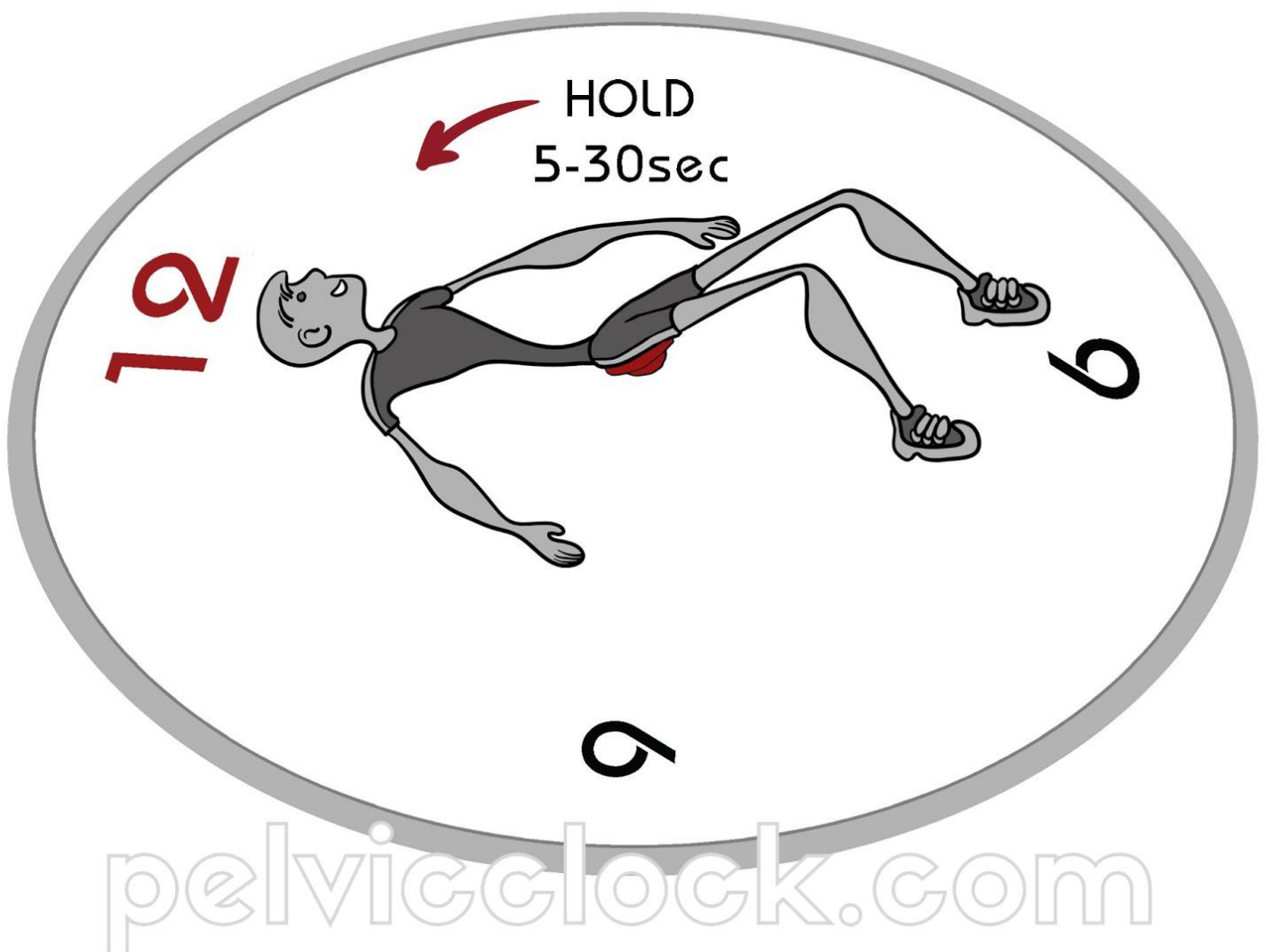
## Exercise "12 HOLD"

EXHALE and tilt your pelvis back toward the **12** o'clock marker, in the direction of your head.

HOLD this position for five seconds without breathing. Press **both QL muscles** against the floor.

INHALE and return to neutral position.

REPEAT 10 times.



# “Clockwise & Counterclockwise”

Clockwise rotation follows the **12-3-6-9** pattern.

Counterclockwise rotation follows the **12-9-6-3** pattern.

Imagine that the axis of the rotation extends from your navel through the center of the device. Then move your pelvis and hips in a circular direction around that center of rotation.

Repeat 10 times.



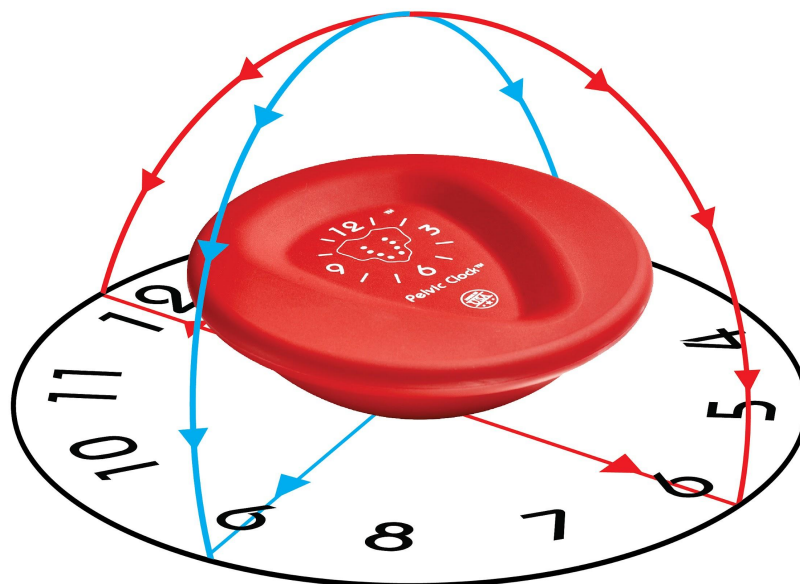
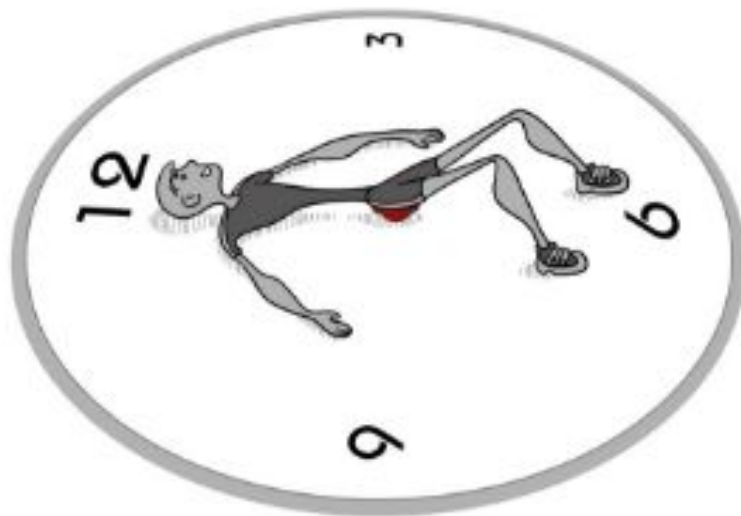
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# Core Stability Exercises

# Find a Neutral Pelvis Position

Before you start with Pelvic Clock® exercises, you should find your Neutral Pelvis Position when your pelvis is neither rotated nor tilted forward, back, or sideways.

Take five deep breaths, as you balance in this position, keeping the flat surface of the device perfectly parallel to the floor.

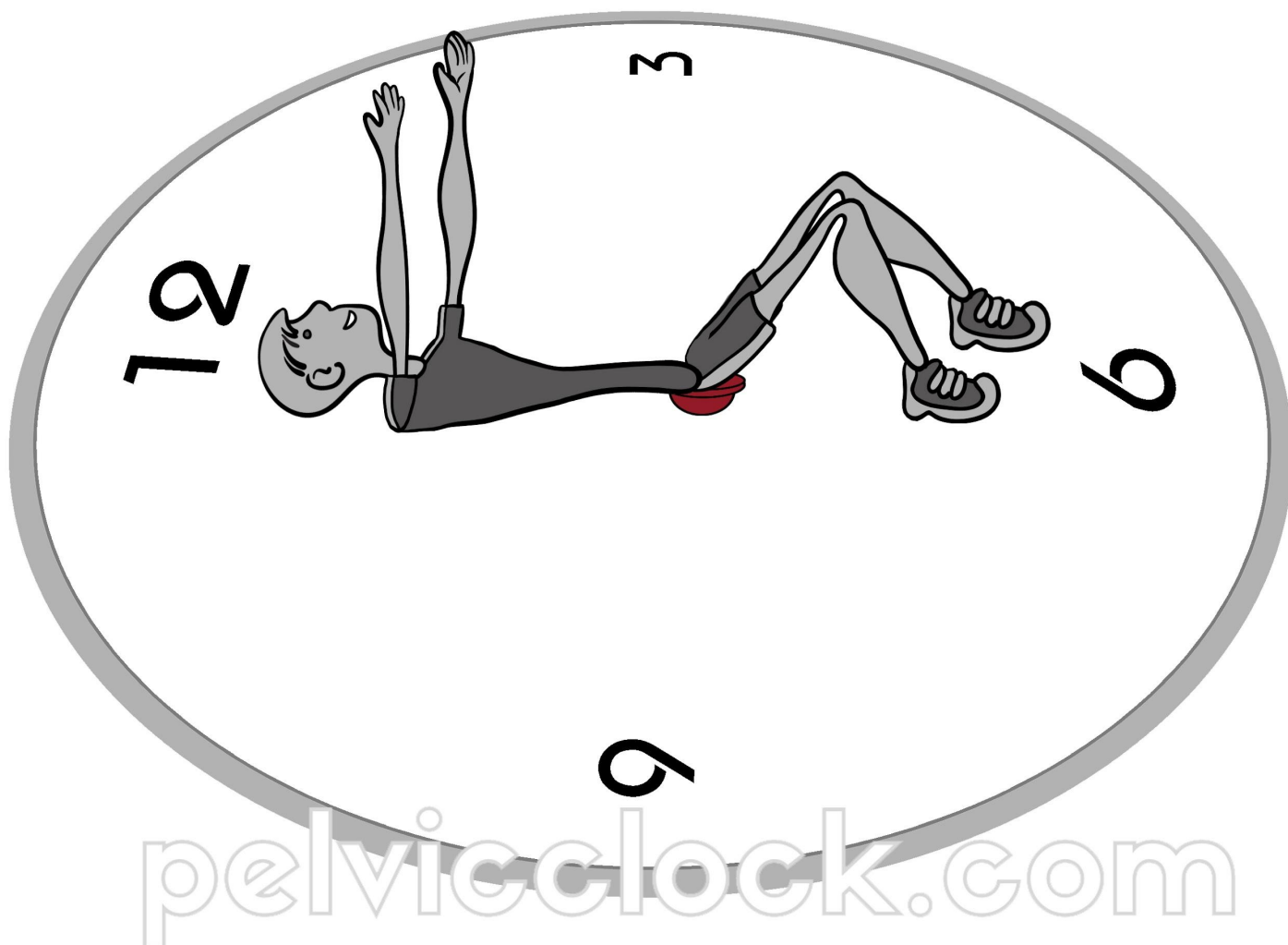


# Arms Up

Stretch your arms up. Hands aligned with shoulders.

Take five deep breaths, as you balance in this position, keeping the flat surface of the device perfectly parallel to the floor.

Repeat 5 times.





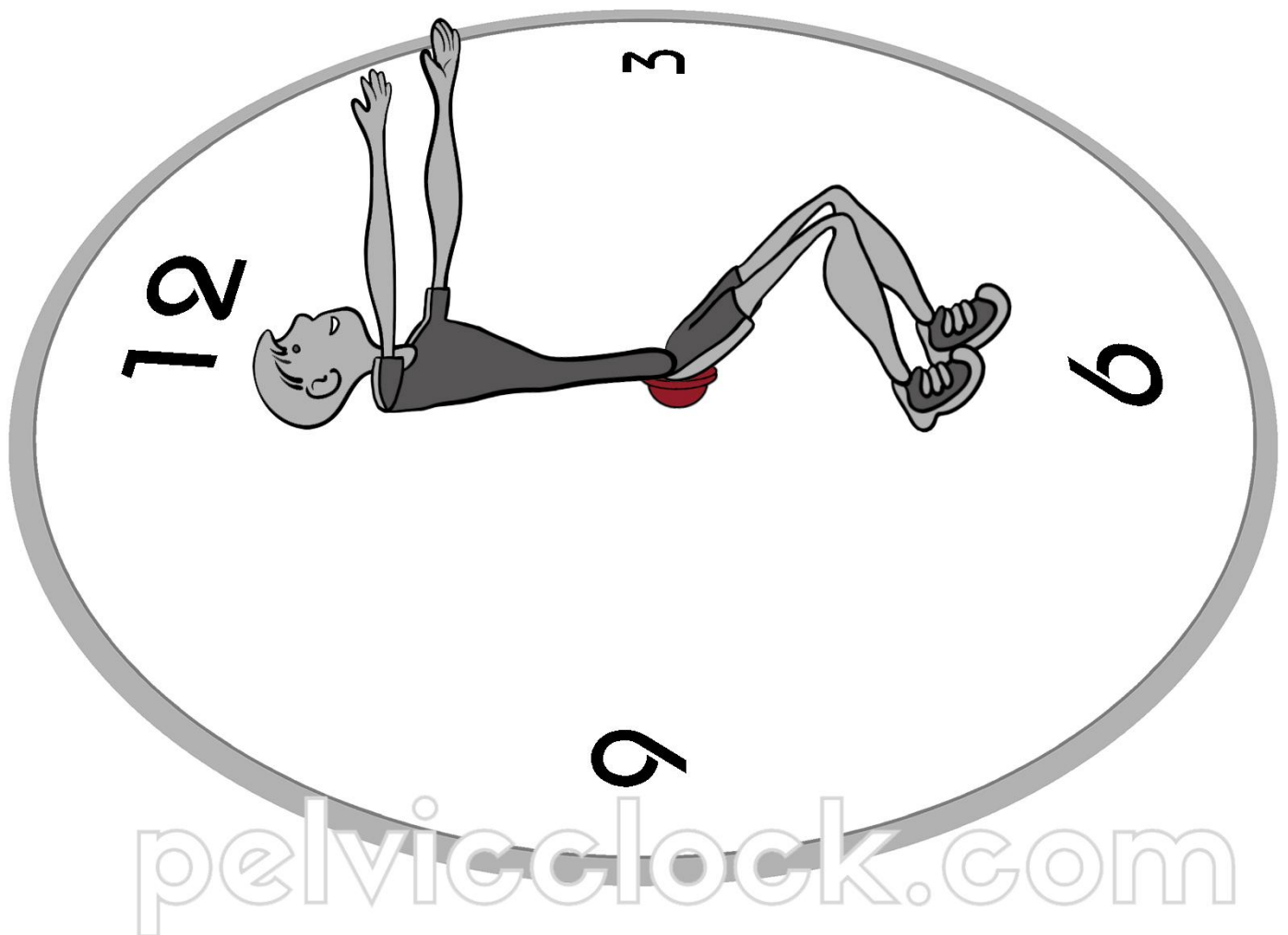
# Balance on Heels

Stretch your arms up. Hands aligned with shoulders.

Lift the soles of your feet up and try to balance on your heels.

Take five deep breaths, as you balance in this position, keeping the flat surface of the device perfectly parallel to the floor.

Repeat 5 times.



# Balance on One Heel

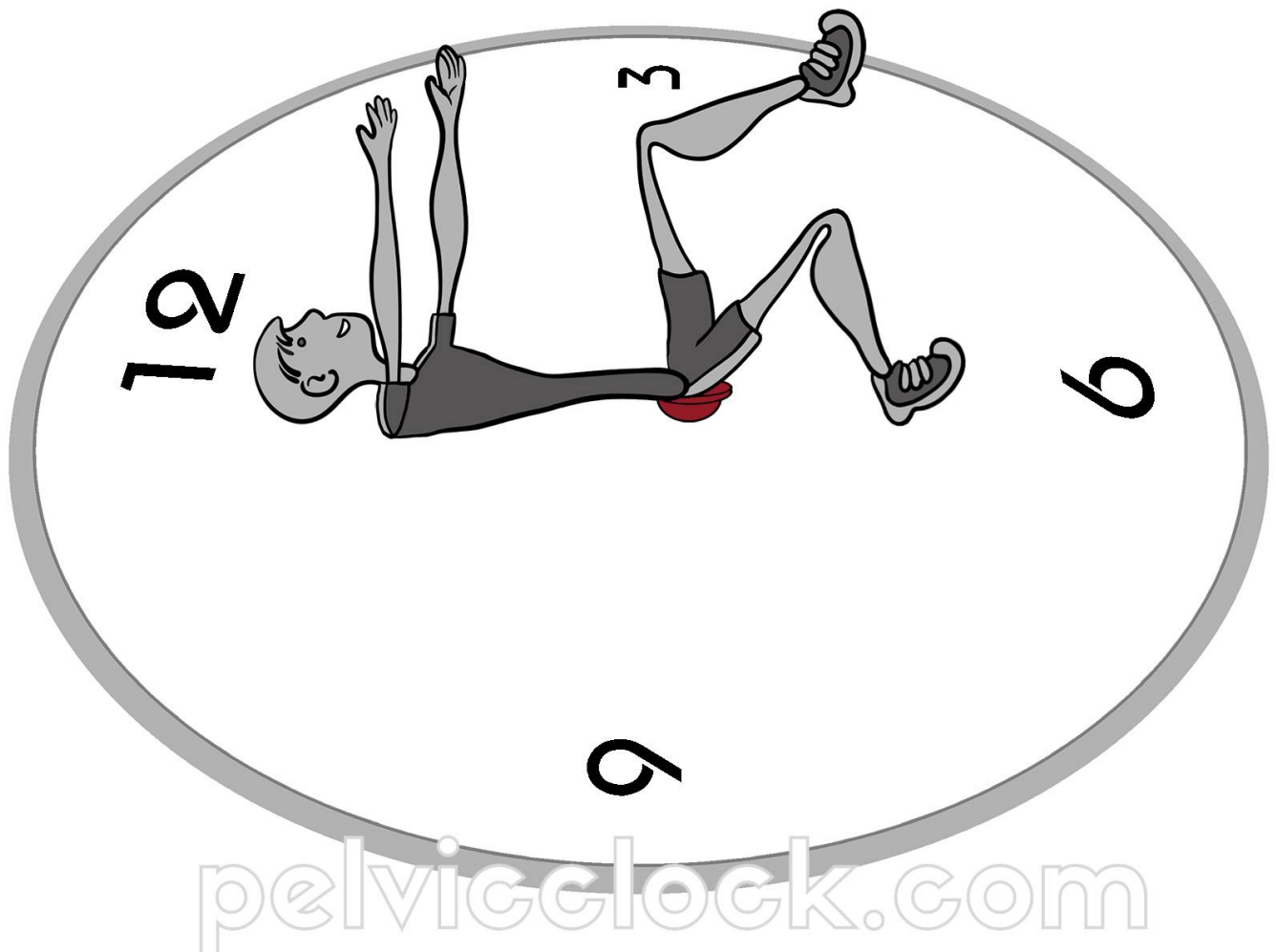
Stretch your arms up. Hands aligned with shoulders.

Lift the soles of your feet up and balance on your heels, keeping the flat surface of the device perfectly parallel to the floor.

Lift your right leg up and bend the right knee at a 90 degree angle. Take five deep breaths, as you balance in this position.

Lift your left leg up and bend the left knee at a 90 degree angle. Take five deep breaths, as you balance in this position.

Repeat 5 times.



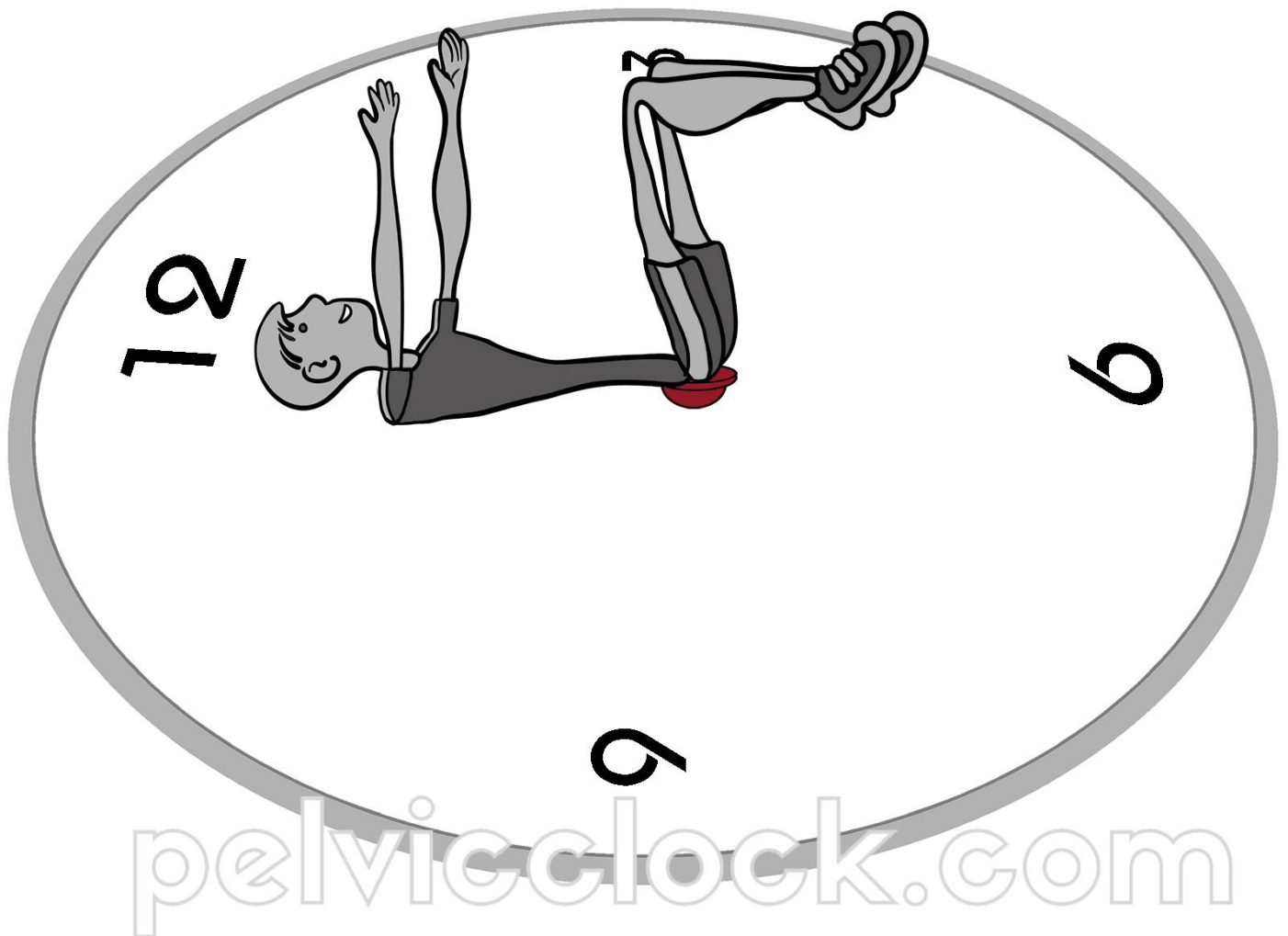
# Dead Bug

Lift your legs up in the air with your knees bent at a 90 degree angle.

Stretch your arms upwards. Hands aligned with shoulders.

Take five deep breaths, as you balance in this position, keeping the flat surface of the device perfectly parallel to the floor.

Repeat 5 times.



# Dead Bug Moving Legs

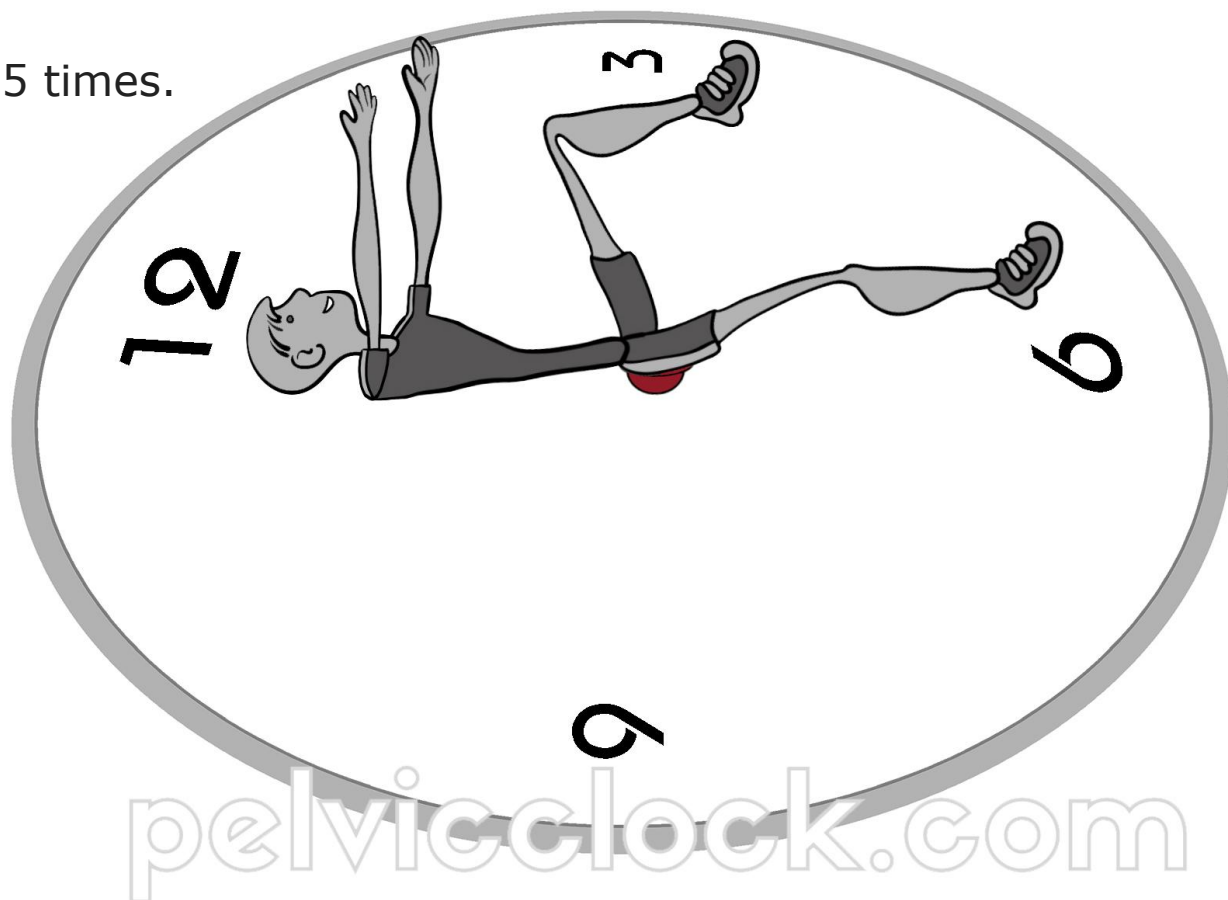
Lift your legs up in the air with your knees bent at a 90 degree angle.

Stretch your arms upwards. Hands aligned with shoulders. Balance in this position for a few seconds, keeping the flat surface of the device perfectly parallel to the floor.

Stretch your **right leg** forward toward the **6** o'clock marker. Keep the leg in the air parallel to the floor. Take five deep breaths, as you balance in this position.

Stretch your **left leg** forward toward the **6** o'clock marker. Keep the leg in the air parallel to the floor. Take five deep breaths, as you balance in this position.

Repeat 5 times.



# Exercise "3-9" with legs up

## ADVANCED

Get into position with your legs stretched upward; your knees can be slightly bent. Open your arms wide and lay them flat on the floor to anchor yourself.

Tilt your hips to **3** o'clock and lower your legs 20 degrees to the left. Balance in this position for a few seconds before bringing your legs back up to center.

Now tilt your hips to **9** o'clock and lower your legs 20 degrees to the right. Balance in this position for a few seconds before bringing your legs back up to center.

Repeat 10 times on each side.

