

The Basics of Balance Bikes

Contributors: Andrea Moore, Greg Schwalje, Strider Bikes

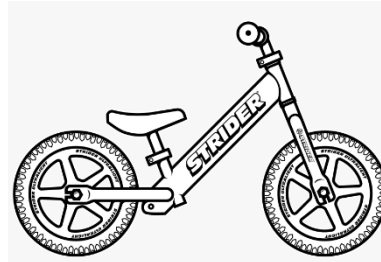
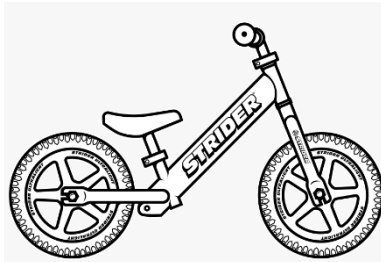
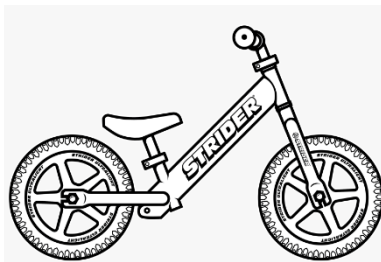
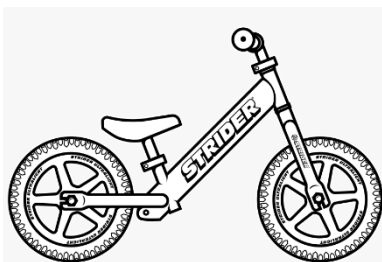
Balance bikes help individuals develop balance and coordination. The use of balance bikes can help develop a new way to exercise and also help some people learn how to ride a 2-wheel pedal bike.

The first priority when teaching people how to ride a balance bike is **safety**. Proper fit while using the bike, knowing how to stop the bike and wearing a helmet while using a bike are all essentials in keeping everyone safe.

The second priority is to have **FUN!** Riding a bike should be fun and exciting. It can also be scary for some people, especially if they have tried to ride a bike before and fell or if they feel unsteady. Encourage people to do their best but do not force them to ride without giving them the support they need to feel comfortable.

Tips:

- **Let riders progress at their own pace.**
In time, everyone will make progress and feel successful.
- **Adjust the bike to ensure proper fit.**
This will allow riders to feel comfortable and focus on the skills and games.
- **Let the rider set the pace: Feeling secure is the key to success.**
By forcing someone to perform a skill he/she is not physically or emotionally ready to do will undermine his/her success and willingness to try.
- **Support the rider, not the bike!**
It is important for the rider to feel the bike tip from side to side in order for him/her to learn how to balance and keep from falling over. If the coach supports the bike as it tips, the rider will mistakenly learn that it is stable in the tipped over position. If the rider needs some support, lightly place a hand on his/her back.
- **Model the skills whenever possible.**
Adult balance bikes are provided for coaches to demonstrate skills with proper alignment.



Proper Fitting

Proper fit ensures that riders can balance adequately and maneuver the bike easily.

Bikes

Adjust the seat height of the bike so that both feet are flat on the ground and there is only a slight bend in the knees. Adjust the handlebars to a position that is most comfortable for the rider. The elbows should have a slight bend and support the torso.

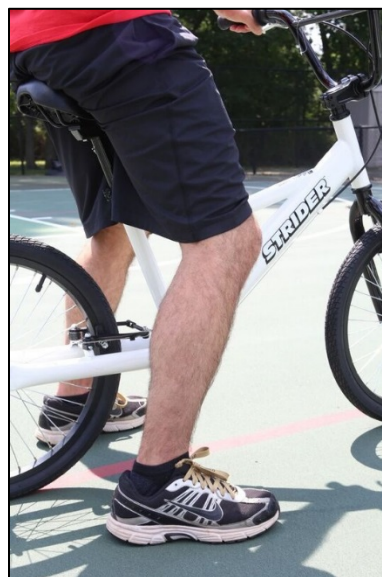
Helmets

Adjust the helmet so that it sits on top of the rider's head and does not shift. The helmet straps should fit snugly under the chin but not too tight that it is uncomfortable for the rider.

Proper Fit



Proper Fit



Too High



Too Low



Developing and Progressing Skills

Developing Skills: Make sure everyone is doing THEIR best!

In a balance bike practice session, riders will be of different ages and abilities, and have different motivating factors. This can make your practices a lot of fun, but also very challenging.

Tips to help all riders develop their best skills:

- Everyone will be at different skill levels. Let everyone know that they are doing their best. Give lots of encouragement and be ready to adapt or progress different skill levels.
- Have each rider work at his/her own skill level. Never compare one rider's skill to another or point out how one person is learning faster or doing better than another.
- Treat each rider as an individual. Some people may not be able to use the hand brakes because of lack of strength in the hands or because their hands are too small. For those riders, focus on stopping the bike with your feet. Not all riders will master every skill.
- Have fun! Play games and bring excitement to your training sessions.
- Focus on progress. Progress comes in all forms, not just going faster (though this is great too). Mastering a skill may take a while, just like any other sport. Progress could be sitting on the bike longer, going longer distances with less help or readjustments, engaging in practice routines more readily or listening to safety commands and having better awareness of others.
- Give consistent and meaningful praise for each rider's accomplishments.



Progressions: Start at the rider's level and build from there!

Progression happens at its own rate and some riders may progress faster than others. There will also be instances in which you will need to reteach a skill that was previously learned, to ensure proper form, alignment and safety.

Tips to help riders with progression:

- Safety always comes first. Make sure riders are able to follow commands and are safe using the bike around other riders and in the environment.
- Make the progressions appropriate for the particular rider. Take into account areas of strength and areas that require improvement.
- Alignment and posture is very important. Make adjustments when necessary.
- Reteach and practice skills often and whenever needed.
- Don't rush.

Safety Awareness

Safety of all riders, volunteers and coaches is your first priority. While encouraging rider independence is important, if a rider is unsafe, he/she may need a high degree of assistance or access to limited environments.

Examples of assistance or limited environments to maintain safety for all riders:

- Verbal cues
- Visual cues
- Limit rider to riding in a separate section of the practice space
- Limit rider to riding only around a small number of other riders
- Limit rider to riding in a separate section of the practice space without obstacles



Important safety concerns:

- **Safety with the bike.**
This refers to safety between the rider and his/her own bike, including not dropping it, throwing it or falling on it. This also includes wearing a helmet at all times and other safety gear as needed. Wearing proper clothing (snug fitting athletic pants or shorts and shirt) and closed toe shoes is best when possible.
- **Safety around obstacles and stationary people.**
This refers to making sure that riders are able to avoid or stop before stationary objects or people. Steering around obstacles is the first choice but braking skills should be used when needed. Using cones or other light weight obstacles is good to help learn this skill. If the rider is not able to avoid obstacles, assess if it is due to difficulty with turning, braking, visually scanning or cognitive difficulty.
- **Safety for moving riders and objects.**
This refers to making sure that riders are aware of other riders or objects around them. This is very important for avoiding collisions. A bit like defensive driving, riders need to consider slowing down when needed or not getting too close to another rider.
- **Safety for environment.**
This refers to watching out for curbs or stairs and not going into the street and other hazards. While this can be taught during training sessions, for generalization of this skill to occur, practice at home and in naturally occurring environments is essential.

Getting On and Off the Bike

Sometimes riders will need time to hold the bike and be near the bike in order to feel comfortable before actually getting on it.

When riders eventually get on the bike, they do not need to sit on the seat right away. Some riders will feel more comfortable just standing over the bike. Encourage sitting on the bike but remember, everyone gets comfortable at their own pace.

Some riders will be able to get on and off the bike on the first try, and others may need more time. The end goal is to have them get on and off the bike without any assistance.

Skills to work on:

1. Picking up and putting down the bike safely
2. Holding the bike by the handle bars while standing
3. Lifting leg over mid bike (getting on and getting off) OR stepping over the bike on the ground and then lifting
4. Keeping balance while sitting on the bike

Challenges:

- Safety and balance while stepping leg over the bike

Strategies:

- Verbal cues broken down into short, specific steps
- Demonstration
- Partial physical assistance
- Practice one part before adding another step

Moving Forward on the Bike

Walking the Bike

Have riders work on walking with the bike from point "A" to point "B" and use clearly marked pathways/straightaways using floor tape, cones or floor markers. Set distances according to each athlete's experience and skill level.

There are three main ways to move forward on the balance bike:

1. striding
2. two-legged push-off
3. one-legged push-off

Some riders may master all three types and some may feel comfortable only using one type. Once a rider can do one or all 3 of these skills, hopefully they will be able to begin gliding, which will be introduced later. Some of these skills involve momentary gliding of very short distances while learning.

1. Striding

This looks like taking long steps while sitting.

Start with taking short steps while seated on the bike. Progress to taking longer steps. When rider can take a long step, add a small push off in each step to begin gliding. Stride should be continuous like walking.

Positives of striding:

- Natural flow like walking
- Easier to control
- Can be done for long periods
- Straight forward movement

Challenges of striding:

- Shifting force from one leg to the other leg may cause body or bike to lean
- Rider needs good alternating coordination

2. Two-Legged Push-Off

This looks like a wide hopping motion while sitting.

Start with small hops forward. Usually both feet move at the same time, but some riders may have one foot move slightly before the other, just make sure steering and alignment are good. Progress to bigger hops for long distances. This movement incorporates a small glide that gets bigger right away. There may be some rocking of the torso forward and backward which is fine as long as the rider has control of the bike. The rider can progress to do several push-offs with 1-2 seconds between each push-off and land with good control.

Positives of two-legged push off:

- Good for learning gliding
- Body tends to stay midline
- May be better with small obstacles and inclines

Challenges of two-legged push off:

- Can be hard to control and steer initially if maintaining midline is difficult
- Tiring over longer distances

3. One-Legged Push-Off

The rider keeps one leg on the foot rest and the other leg pushes off. Similar to a scooter motion.

This is similar to two-legged push-offs. This movement may have some slight side to side motions. This is acceptable if it helps the rider and doesn't stop him/her from propelling forward. Start with small pushes and progress to larger ones.

Positives of one-legged push off:

- May be preferred for riders who have one side/leg stronger than the other
- Useful for long turns

Challenges of one-legged push off:

- Only exercises one side
- Riders tend to twist towards the pushing side
- Push side may fatigue quickly
- Needs more effort to glide



Gliding

Gliding (including going straight and turning) is using built-up momentum and riding the bike without using feet to move forward. This skill requires the most coordination and balance of all the skills.

Using the progressions for the movements described for moving forward on the bike, work on increasing short distance gliding. Once a rider is able to glide, it is important to continue to practice to help him/her glide more effectively and for longer distances.

Challenges of gliding:

- **Comfort**
Sometimes not having feet in contact with the ground can make a rider uneasy and feel unsafe. Demonstration may help, but often this requires continuous practice of shorter glides until the rider feels comfortable. Encouraging the rider towards small progressions may be helpful.
- **Power**
Gliding is greatly limited by how fast and how hard a rider can push off without losing balance. If a rider is able to go straight, but has difficulty gliding for longer distances, exercises such as jumping and leg strengthening may help.
- **Fluidity of movement**
When going faster on a bike, it is sometimes difficult to keep up speed and coordination. This results in a good start but loss of form and coordination after speed increases. Slowing down to a comfortable speed or shorter glide periods with less build up is recommended. Progress to faster and longer glides as the rider builds skill.

Note: There is no documented gliding time that indicates a rider is ready for a pedal bike. If the parents want their child to ride a pedal bike, the mastery of gliding may help the rider achieve that goal.

Braking and Safety Awareness

Braking is the skill of stopping the bike when it is in motion.

Steering, rather than braking, is ideally the first option to avoid hitting other riders or obstacles. It is recommended to practice this first so if someone turns and needs to stop right away, he/she can do so safely.

When using a balance bike, there are two types of braking:

1. Feet braking (most common)
2. Hand braking if the bike has hand brakes

1. Feet braking

This will be the first way a balance bike rider will stop his/her bike from moving. The rider can make small fast stomps, keeping the feet in front/under the hips rather than dragging the feet behind.

2. Hand braking

Hand braking requires the rider's hand fit around the brake and that the rider has enough hand strength to squeeze the brake. This is the best way to brake when the rider begins to ride faster.

Focus on safety awareness by teaching how to steer to avoid obstacles and review how to decrease speed slowly before reaching destination.



Steering

The key to steering is moving only the handlebars and not the entire body. This tends to be the biggest challenge for new riders.

Progression:

1. Rider can go straight most of the time
2. Rider can start going around or away from an obstacle or cone. This will call for slight movement of the handlebars.
3. Once the above is mastered, encourage him/her to go around a large circle or arc requiring more turning of the handlebars and then progress to smaller and tighter turns so that the rider learns not to turn too much.
4. The final progression is making a series of turns in different directions. All steps should be done ideally without stopping.

Walking and turning:

This is useful when you need to do a 180 degree turn. This takes practice and the rider will need to control the bike more with his/her upper body or it is likely the bike will slip.

Strategies:

- Practice steering and turning the handlebars while sitting on the bike in a stationary position
- Verbal cues

Practice Planning

This section will provide a template for organizing a balance bike program and training sessions.

Be mindful that all riders will learn at various rates and will require different levels of support.

Training Session Template

This template can change from practice to practice or as you get to know the riders.

Welcome	5 minutes	<ul style="list-style-type: none"> Review rules Review practice schedule – use visual schedule if appropriate
Off bike warm up	10 minutes	<ul style="list-style-type: none"> Balance, coordination and power games
On bike safety check	5 minutes	<ul style="list-style-type: none"> Check helmets and adjust bikes Practice getting on and off bikes
On bike warm up or review of skills	5 minutes	<ul style="list-style-type: none"> Can include standing over bike, sitting on bike, alternate picking one foot off the ground, steering the handlebars without moving
Demonstration of skills and practice of new skills	10 – 15 minutes	<ul style="list-style-type: none"> Group or individual instruction based on the ability of the riders
Games or free ride	10 – 15 minutes	<ul style="list-style-type: none"> Group or individual instruction based on the ability of the riders
Wrap up	5 minutes	<ul style="list-style-type: none"> Positive feedback, brief skill review, encourage practice at home

Progression of Skills

The following is an outline for skill progressions. You can progress faster or slower based on the skill of the rider. Volunteers can work individually with each rider. Use stations to divide the riders into skill level and allow each one to participate to the best of his/her ability.

The following is just a guide to help you plan each training session.

Week One	<ul style="list-style-type: none"> Safety & Rules Getting on and off bike Striding
Week Two	<ul style="list-style-type: none"> Review Week One Striding
Week Three	<ul style="list-style-type: none"> Striding Braking Safety
Week Four	<ul style="list-style-type: none"> Two-legged push-off One-legged push-off
Week Five	<ul style="list-style-type: none"> Review Weeks Three & Four Basic steering Braking
Week Six	<ul style="list-style-type: none"> Steering & advanced steering Braking
Week Seven	<ul style="list-style-type: none"> Review steering Gliding
Week Eight	<ul style="list-style-type: none"> Review of all skills Gliding

On Bike Games for Bike Skills (some games and activities adapted from Strider Inclusive Riding and Young Athletes resources)

Foot High Five:

1. Have rider sit on the bike
2. Sit in front of the bike without holding onto any part of the bike
3. Hold up your hand in front of one of the rider's feet and ask them to give your hand a foot high five
4. Repeat with the other side

Tips:

- Use this as a warm up especially during the first few weeks
- For riders who are stronger on one side than the other, you can use this drill, focusing twice on the weaker side and once on the stronger side
- Great for riders who are getting comfortable just sitting on the bike

Balance Bike Simon Says:

Played just like traditional Simon Says but with a focus on safety and basic bike skills. Some directions can be done while standing next to the bike, such as "Simon Says touch the handle bars with both hands." or "Tap the top of your helmet with one hand." Directions on the bike can include "Simon Says sit on the seat.", "Simon Says pick up one foot." or "Simon Says rock back and forth." Do not worry about riders getting "out", but rather use it as a game to build awareness.

Tips:

- Let the riders in your group guide your game and choose skills that are based on the levels in your group so that all riders can be successful
- Choose a rider to be Simon

Dice Rolls or Card Drawing:

1. Riders roll dice or pick cards with actions on them and everyone does them
2. Actions can include:
Twist handle bars, lift one leg for 10 seconds, quickly lift both legs twice, check the brakes, move back 5 steps

Tips:

- Let the riders in your group guide your game and choose skills that are based on the levels in your group so that all riders can be successful

Follow the Leader:

1. Choose a skill for the riders to imitate
2. The leader demonstrates the skill and the riders follow along
3. Have coach and riders take turns being the leader

Tips:

- This is a great game to use during any portion of the training as you can do beginner or advanced skills
- This is a great confidence booster for all riders, especially when it is their turn to be the leader

Blast Off Contest:

1. Riders pretend to be airplanes or rocket ships
2. Create four areas in the practice space: Start Zone, Run Zone, Blast Off Zone and Landing Zone
3. On the start command, riders begin moving their bikes forward from the Start Zone
4. When riders are in the Run Zone, call out "3... 2... 1... Blast Off!" as they move into the Blast Off Zone
5. Riders do their best to glide as fast as they can with no feet on the ground through the Blast Off Zone until they reach the Landing Zone

Tips:

- This is a great game to help riders who are ready to progress to gliding
- This activity helps to promote starting and stopping and riding with a group
- You can modify this activity so that the riders ride within a circle for those who are working on steering

Red Light, Green Light:

1. Riders line up facing the coach several yards away
2. When the coach holds up a green GO signal (can be colored circle, polyspot, etc.) and yells "green light", the riders will stride forward
3. When the coach holds up a red STOP signal and yells "red light", the riders need to stop where they are
4. The first person to reach the coach becomes the caller for the next game

Tips:

- Review how to brake and safety awareness
- This is a great game to practice riding next to others and being aware of your surroundings
- Incorporate different types of propelling by calling out "walk," "run" or "glide"

Obstacle Course:

1. Set up cones, ramps or use gym floor tape to map out a course for riders that includes straightaways and turns
2. Riders stride or glide through the course

Tips:

- Incorporate more difficult obstacles and turns for more advanced riders
- Use music to make this a fun activity and encourage a faster or slower pace
- Time each rider and encourage him/her to beat his/her best score
- Create two courses and create two teams of riders for a relay race

Treasure Hunt:

1. Spread out cones and hide small objects under some
2. Set out an open "treasure chest" to fill
3. Riders ride around and collect objects to fill the treasure chest

Tips:

- Make sure there is ample room to negotiate around turns
- Riders will need to be able to get on and off their bikes for this game

Act Like an Animal:

1. Riders line up on their bikes
2. Coach calls out an animal and riders have to ride forward imitating that animal:
 - Elephant (stomp)
 - Cheetah (go fast)
 - Mouse (tiny and quick steps)
 - Jack rabbit (jump with both feet at the same time)
 - Sloth (slow steps)

Tips:

- Encourage riders to call out other animals
- This game can be modified so that all riders are successful by calling out animals that might be easier to imitate than others
- This activity helps promote range of motion and comfort on the bike

Hand High Five Game:

1. Riders spread out on their bikes in the practice space
2. Riders ride towards each other, stop and then give a friend a high five before moving on to the next person

Tips:

- This is a great game for socialization and team work
- This game helps to promote starting and stopping
- Incorporate a STOP and GO signal or whistle

Off Bike Games for Balance, Coordination and Power

Balance Games

Can You?:

1. Ask riders to perform a variety of movements that require static (nonmoving) balance.
2. "Can you . . . ":
 - Stand with feet together with hands on hips, shoulders or your head?
 - Stand with feet together with arms straight out to the side, straight up or one arm up and one arm out to the side?
 - Stand on toes (balls of the feet and toes) with arms straight out to the side, straight up or one arm up and one arm out to the side?
 - Stand on the right foot and then on the left foot with hands on hips, shoulders or head?

Trees in the Forest:

1. Have riders pretend to be trees by having them stand with their feet on two floor markers "planted" in the ground
2. Using a scarf, pretend to be the wind and move in and around the riders fanning them with the scarf
3. Riders bend and sway when the "wind" blows

Tips:

- Increase difficulty by having the rider put both feet on one floor marker or stand on one foot

Freeze Dance:

1. Riders stand spread out in practice space
2. Start music and instruct riders to dance until the music stops
3. Stop the music and call "freeze."
4. Riders freeze in their position and balance until you begin to play music again

Tips:

- Vary music from slow to fast

Coordination Games

Imagine This, Let's Pretend:

1. Riders stand spread out in practice space
2. Call out an image that requires riders to move their arms and legs at the same time
3. Images can include:
 - Pretend you are a giant walking through the woods. Take big high steps with big swooping arms.
 - Imagine you are a robot walking down the street. Walk with stiff arms and legs.
 - Pretend you are a walking bowl of wiggly Jello. Walk and wiggle.
 - Pretend you are in a marching band. March with high knees and pump your arms.

Tips:

- Model movements for the riders
- Watch to see that all riders are using their arms and legs in opposition

Coordination Games, continued . . .

Animal Exercises:

1. Riders stand spread out in practice space
2. Tell riders that they are going to pretend to be animals and move around the practice space
3. Demonstrate the following movements:
 - Bear Crawl: Have riders bend down with their hands and feet on the ground. Encourage them to crawl or walk like a bear. Make sure their knees do not touch the ground. Growl for fun!
 - Elephant Walk: Have riders put their hands together in front of their bodies to form elephant trunks. Encourage them to stomp their feet and swing their "trunks" as they walk around the practice space.
 - Crab Walk: Have riders sit on the floor with feet flat on the floor, knees bent and hands on the floor, slightly behind the body. Ask them to lift their hips off the floor and walk their hands and feet backwards.

Power Games:

Hoop Hop:

1. Set out one hoop per rider or pair of riders
2. Riders hop as you give the following directions:
 - How far around the outside of the hoop can you hop? Try the right foot, then the left. Show me how you can hop in and out of the hoop. How fast can you go?
 - Can you hop while turning inside the hoop?
 - Hop to another rider's hoop on one foot and then back to your hoop on the other.

Tips:

- Model the activity for the riders

Wall Jump:

1. Mark the wall with a sticker, picture or chalk mark
2. Line riders up by the pictures or chalk marks
3. On the GO command, riders jump up to touch the pictures or chalk marks
4. Once the riders are successful, raise the pictures or chalk marks to increase the difficulty

Tips:

- Use verbal cues such as bend and reach

Jump the Brook:

1. Spread out two long ropes, or use floor tape, with one in a straight line and the other at a 45-degree angle to form a "V" shape with a narrow and wide end
2. Tape pictures of alligators and fish to the floor inside the "V"
3. Have riders face the straight line rope and jump over the brook to the opposite side
4. Riders can choose different widths to jump

Tips:

- Focus on two foot horizontal jumps. Incorporating leaping is an acceptable modification.