

Ball skills

Ball skills are extremely complex skills to develop. Almost all of our senses are involved in ball skills, which is why it is such an area of difficulty for many children. Listed in the table below are the senses involved in ball skills:

sight	following the ball's movements
hearing	the sound of the ball hitting the wall or the floor warns that the ball is on its way back
hand/eye co-ordination	getting the hands ready and in the right place to catch the ball
touch	the ball touching the palm stimulates the fingers to close on the ball
kinaesthetic sense	estimating the force of the throw and the position of the limbs when trying to throw and catch
perception of direction	which direction should the ball be thrown and how it will rebound.
perception of velocity	how quickly will the ball reach me, how much time have I got to move into place to catch it?
perception of space	how far should the ball be thrown?
balance	running and jumping must be done to catch the ball and follow it on
speed and ability to react	being in the right place at the right time

When something to hit the ball with such as a racket or bat is introduced then the difficulty increases again.

Throwing

Throwing requires:

- being in the correct position to throw
- judging the distance and direction for the ball to be thrown
- judging the force to be applied to throwing the ball

Underhand throwing is the easiest to control. The whole body should take part in the movement. One arm is drawn back and the body rotates at the trunk. Weight is transferred from one leg to the other as the body rotates to throw the ball. The starting position is such that the foot opposite the throwing arm is brought forward. The weight is on the back foot and as the arm swings through the weight is transferred onto the front foot. Releasing the ball at the right stage during the arm movement and using the whole body in order to get the right amount of force behind the throw requires co-ordination.

Catching

When catching the child needs to:

- be prepared to catch
- keep their eyes on the ball
- successfully trap the ball in the palm of their hand/s

At first, practise with catching a large ball. The child can hold their hands and arms forward and wait for the adult to throw. When the ball touches the arms, the child bends his elbows and draws the ball in towards his chest. The child does not at this stage make any bodily movements to adapt to the direction of the ball. Later the child learns to spread his fingers out with the hand on each side of the ball. If the ball is small, the hands first make a bowl

shape for the ball to fall into. The touch of the ball on the palms of the hands stimulates the hands to hold on to the ball. If the reaction is not quick enough the ball falls through the fingers. If the ball is to remain in the hands the grip must not loosen.

Being prepared to catch

Start by throwing and catching a large ball. Not being in the correct starting position to catch is a common problem and can be taught. Teach the child to:

- stand square onto the direction of the ball, feet level and a shoulder's width apart
- teach child to have knees slightly bent and show child how to gently bounce on their knees, as by bending at the knees enables them to respond to the height of the ball as it reaches them
- hold hands up in front of them at chest level, open, palms up and both hands close together
- keep their eyes on the ball at all times not on the thrower

Catching the ball from standing still

Learning to catch can be graded by:

- rolling the ball to a sitting child can be the easiest way to initially trap a ball
- the size of ball: a big soft ball to be caught with two hands it easiest build up reducing the size of the ball until child can manage a small ball to be caught with one hand
- type of object thrown: it doesn't always have to be a ball, bean bags can also be easy to catch as can big soft objects such as cushions. You could also fold a skipping rope into quarters and tie a knot in the middle
- speed it is thrown: start with throwing slowly as this gives the child a chance to learn to follow the trajectory of the ball
- distance it is thrown: start close to the child, as close as is needed for a successful catch and gradually increase distance

Catching the ball while moving

- As children master catching a ball thrown directly in front of them start to throw to the side. The child needs to learn to bend the knee on the side the ball is thrown to.
- Once this is mastered increase the difficulty by throwing so the child has to take a step either forward, to the side or backwards to catch. Let the child master one action before introducing another. Let the child know where you will be throwing before you start and use grading methods as before re ball size, speed etc.
- Finally reduce verbal prompting and let child respond independently to where the ball may arrive.
- Introduce the concept of having to run for a ball, again start by letting the child know where the ball will be arriving. Be aware some children who have co-ordination or other movement-based difficulties will not achieve this level of skill.

Throwing

Position to throw

Teach the child how to position ready to throw

- underarm is easier than overarm
- knees slightly bent
- feet level and shoulder width apart
- practise ball skills in a variety of positions, eg high kneeling, half kneeling, in a 'crab' position or lying on their tummy

Throwing an object

- Start with rolling activities
- Bowl a beanbag over progressively longer distances, high into the air, or at a large target, eg a door, a wall
- Draw a chalk circle on the ground and throw beanbags into the target, increase the distance
- Throw beanbags into a waste paper basket, or at skittles
- throw a beanbag as high as possible and as hard as possible at a wall, or as far as possible
- Try throwing a ball in different styles, eg hard, soft, short distances, far away, etc.

Hitting a target

- Targets should be very large to give success and it is the action that is important. The targets can be made progressively smaller and help to focus the child onto the task in hand.
- The distance of the target can be changed to make the child aim and learn to judge the amount of effort needed to ensure the object being thrown reaches the target. This is known as the force of the throw.

Additional notes

- Provide verbal feedback to reinforce what just happened and to help the child decide on the amount of force, direct, etc. needed for the next attempt.
- All the activities should be made to be as much fun as possible as children learn better when they are enjoying themselves. Use imagination and stories to colour the games.
- Success is important and competition should be against the child himself rather than others, eg when the child catches the ball successfully three times in a row, he or she can move a step back.