Circle games

These games are designed to develop trust and good group work in the class, alongside developing and practicing mathematical skills.

Circle games help build the classroom ‘ensemble’: they are non-competitive and are played in the spirit of the group succeeding. Players should not try to catch each other out: instead they should support each other so that the entire group ‘wins’. Leader directions should focus on this building of a supportive atmosphere as well as building energy by encouraging the players to keep things moving.

For these games to be most successful, players have to make sure that they make clear eye contact with other players: children can experience discomfort with this at first but with gentle persistence they do overcome this.

Zip-zap-zop

Age Level: Any
Aims: Quick thinking, group cohesion, warm-up, teamwork

Zip-zap-zop is a traditional warm-up game that forms the basis of mathematical variations. It is best introduced in its traditional form and then played with a mathematical slant – suggestions for this follow.

The goal of the game is to pass the words – zip, zap, zop – and energy around the circle as quickly and smoothly as possible – this is harder than it seems. You may find that it takes several tries to get into the rhythm of the game. Don't give up! Eventually, the group will begin to go at a pace.

Zip-zap-zop

Start with everyone standing in a circle.

One person makes eye contact with someone across the circle, takes a small step forward, claps and points while saying *zip* (they then step back into place in the circle).
The person who received the *zip* then makes eye contact, steps, claps and points at another, while saying *zap* (again then stepping back into place).

The person receiving the *zap* then steps, makes eye contact, claps and points to someone while saying *zop*.
The pattern continues, *zip, zap, zop, zip, zap, zop....*

Encourage the players to be 'ready' to be receivers: hands out of pockets, arms unfolding, watching where the sound has got to. Also players should not spend time deliberating over who to send the sound to: they don't look for their 'friends' but someone across the circle who is ready to 'catch' the sound.

Directing the play

If you can't see everyone, then they can't see you, so you'll need to move.

Make it very clear who you are sending the sound to.

Don't take too long to choose someone

Remember we're working to look good as a group.

Two-four-six

Age Level: Any
Aims: Counting skills, group cohesion, teamwork

Two-four-six is a mathematical variation on **zip-zap-zop**: children will need to be familiar with how to play **zip-zap-zop** before learning this game.

The goal of the game is for the class to count in a number pattern in a smooth and quick fashion. Unlike counting round the circle, the challenge here is that players cannot anticipate when their turn will come and so have to keep on listening. Can the class work together to pass the numbers round the circle in a smooth and fairly swift way?

Two-four-six **Directing the play**

The basic play is the same as for **zip-zap-zop**, only this time what is passed around the circle is a continuous counting in 2's – 2, 4, 6, 8, 10

Keep watching and listening to be ready.

One person makes eye contact with someone across the circle, takes a small step forward, claps and points while saying *two* (they then step back into place in the circle).
The person who received the *two* then makes eye contact, steps, claps and points at another, while saying *four* (again then stepping back into place).

Remember we're trying to succeed as a group.

The person receiving the *four* then steps, makes eye contact, claps and points to someone while saying *six*.
The count continues, *two, four, six, eight, ten, twelve....*

If the count gets 'stuck' with a player, tell them the number quite quickly and in a non-judgemental way – there should be minimum sense of individual accountability and maximum focus on the group as a whole succeeding.

Variations:
Start the count at 26, 42, 33.
Start the count at 100 and count backward in 2s.
Count on in 5s, 10s, 3s …

Equations

Age Level: 8 and upwards
Aims: Calculation skills, group cohesion, teamwork

Equations is a mathematical variation on **zip-zap-zop**: children will need to be familiar with how to play **zip-zap-zop** before playing this game.

The goal of the game is for the class to construct a series of mathematical equations in a smooth and quick fashion, for example *three times six equals eighteen.*

Emphasise to the class that the point is NOT to try and catch someone out by making the equations too difficult – numbers should be chosen so that other players are made to look good.

Equations 1

Directing the play

Play is set up and proceeds as in **zip-zap-zop**. In this version equations are created as the players, one at a time say one (or two) word(s) building to an 'equals' and answer.

One person makes eye contact with someone across the circle, takes a small step forward, claps and points while saying, say, *two* (they then step back into place in the circle).

Don't think too long.

The person who received the *two* then makes eye contact, steps, claps and points at another, while saying, say, *times* (again then stepping back into place).

You don't have to look for a friend to send the number to.

The person receiving the *times* then steps, makes eye contact, claps and points to someone saying, say, *six*.

Keep things easy, so that your classmates cant give the answer.

This continues until someone says equals and the next player completes the equation with an answer. The player receiving the answer starts a new equation. For example *two times six equals twelve eight plus two equals ten twenty divided by* and so on.

As players become more confident, encourage them to extend the equations created to have more than one step:

Keep it going, don't say equals too soon.

Three times six plus two divided by ten equals two.

Silly Equations

Age Level: 8 and upwards
Aims: Calculation skills, group cohesion, teamwork

Silly Equations is a mathematical variation on **zip-zap-zop**: children will need to be familiar with how to play **zip-zap-zop** before playing this game.

Silly Equations is played the same way as Equations, except that there is no expectation that whoever gets to speak after *equals* is passed to them has to give a correct answer. In fact wildly incorrect answers are encouraged, for example *three times six equals seventy-nine*.

This variation encourages everyone to be more playful in their approach to the game, as the pressure to accurately remember and recall is lifted. The 'payoff' is that more mathematical vocabulary is introduced: this can lead to later discussion about meaning and use. It also encourages everyone to take part and lifts the fear of giving a wrong answer.

Silly Equations **Directing the play**

Play is set up and proceeds as in **Equations**. In this version equations are created as the players, one at a time say one (or two) word(s) building to an 'equals' and an outrageous answer.

One person makes eye contact with someone across the circle, takes a small step forward, claps and points while saying, say, *seven* (they then step back into place in the circle).

Don't think too long.

The person who received the *seven* then makes eye contact, steps, claps and points at another, while saying, say, *divided by* (again then stepping back into place).

You don't have to look for a friend to send the number to.

The person receiving the *divided by* then steps, makes eye contact, claps and points to someone saying, say, *seventeen*.
This continues until someone says equals and the next player completes the equation with a silly answer. The player receiving the answer starts a new equation. For example *seven divided by seventeen equals eighty-six eight plus nine equals minus four* and so on.

As players become more confident, encourage them to extend the equations created to have more than one step:
Three times six plus two divided by ten times 17 divided

Keep it going, don't say equals too soon.

Yes, and

Age Level: Any
Aims: Mathematical application, group cohesion, teamwork

Yes, and is a collective story building game: each player adds one sentence to the story. Every sentence must start with the words *Yes, and* so the story builds on what has gone before.

The first time children play **Yes, and,** it's likely that the stories they build together are not very coherent or imaginative: they will be so concerned with their own 'performance' that they cannot listen to what is being offered by the other children. As they become more experienced at playing the game, encourage them to listen more carefully to each other. Ask them the treat what is said as if it is the most important thing in the world and to build on it rather than simply add in another random piece of information.

Yes, and **Directing the play**

In a circle, explain that the group is going to develop a collective story. Each person is going to say one sentence to add to the story.

There are **two rules** about their offerings:

1) Every sentence MUST begin with the words **yes and** and so build on what the person before has said (except the first sentence of the story).

2) It has to include some mathematical information.

As the children to suggest a title for their story. The person suggesting a title gets to start. They also choose whether the story will develop around the circle clockwise or anti-clockwise

Mary: Grandma's big day out.

Mary: Grandma got up at 6 in the morning for her big day out

Remember to start with Yes, and

Jo: ***Yes, and*** *she was excited about seeing her 7grandchildren*

Sam: ***Yes, and*** *she was going to walk 3 miles to visit them*

Chris: ***Yes, and …***

Can they make the story interesting AND develop the mathematics?

Listen carefully, rather than trying to plan what you are going to say