Run sheet, Bigger, Smaller, Same

Goal. Every girl puts two real things side by side and says which is bigger, which is smaller, or that they are the same.

Before you start

- Gather three or four things per girl: palm-sized stones, leaves, sticks, large caps, cups. Sizes must differ a lot. Nothing that fits inside a ring of your thumb and first finger.
- At each place: Sheet A and Sheet B, a pencil or one between two. Sheet C only for 60.
- **We compare things, never people.** No girl's body, height or belongings go into a comparison today.

The clock, 30 minutes

- 0 to 4 min: two stones, two words
- 4 to 11 min: side by side, ends level
- 11 to 18 min: the hunt
- 18 to 25 min: the line of three
- 25 to 30 min: hold it up and say it

Run 30 with a new group, 45 with mostly four-year-olds. Shorten the middle, never the close. In 45: 0 to 6, 6 to 17, 17 to 26, 26 to 38, 38 to 45. In 60: 0 to 8, 8 to 22, 22 to 34, 34 to 50, 50 to 60, where the hunt adds Sheet C.

What you do

1. Hold up two stones, one big, one small. Say: "This one is bigger. This one is smaller." All say both back, twice. Then hold up two that match: "These two are the same." All say it back.
2. Show the rule slowly, twice: bring them together, bottoms on one line, then look.
3. Give each girl two things. She lays them out ends level and says aloud which is bigger.
4. Go round. Ask each girl: "Which is bigger? Say the word." Wait for the word, not a point.
5. Hand out Sheet A. Each girl draws the bigger one in the big box, the smaller one in the small box.
6. Say: "Find something bigger than your stone. Now find something smaller." Walk with the ones who wait.
7. Give a third thing to any girl who has ordered two with confidence. Say: "Put all three in a line, smallest first." Hand out Sheet B. Two things is a finished job for the youngest.
8. Ask one girl at a time: "How do you know?" Level her two things in front of her and ask again.
9. Close in a circle. Each girl holds up two things and says one sentence. Repeating is allowed.

Watch for

1. A girl lines two things up with their bottoms level before she answers, without being told.
2. A girl says "bigger", "smaller" or "the same" aloud instead of pointing.
3. A girl puts three things in order and moves one herself when her line is wrong.

What goes wrong most. She answers from where the things are lying, so the far one looks smaller. Bring both to her, ends level, and ask again.

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Learner sheets, Bigger, Smaller, Same

Sheet A, my two things

One copy per girl

Name: _____ Date: _____

Put your two things side by side. Bottoms on the same line. Now look.

Draw the bigger one here.

the bigger one

Draw the smaller one here.

the smaller one

Your leader will read these two words to you. Mark one.

☐ **THE SAME** ☐ **NOT THE SAME**

One word for your two things. Go over the line.

my word

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Sheet B, my line of three

One copy per girl

Name: _____ Date: _____

Put three things in a line. The smallest one first. Then bigger. Then biggest.

Draw your line here, in the same order.

smallest first, then bigger, then biggest

Point at the biggest one. Say the word out loud.

Now swap one thing for a new one. Make your line again.

Did your line change? Your leader will read these words to you. Mark one.

☐ **YES** ☐ **NO**

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Sheet C, the same size as my hand (60 minutes only)

One copy per girl

Name: _____ Date: _____

Print only for 60 minutes. Not needed for a 30 or 45 minute session.

Put your hand flat on this box. Draw around it.

draw around your own hand

Find one thing that is the same size as your hand. Put it on your drawing and look.

Your leader will read these three words to you. Mark one.

☐ **BIGGER** ☐ **SMALLER** ☐ **THE SAME**

More time? Turn this sheet over and draw a line of four things, smallest first.

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What to print

- **Once, for yourself:** page 1, the run sheet.
- **One copy per girl:** page 2 (Sheet A) and page 3 (Sheet B). That is 2 pages per girl.
- **You do not need:** pages 5 to 13, the guide and the key and page 4 (Sheet C). The session runs without them.

Guide, Bigger, Smaller, Same

Group 4 to 24 · Materials: paper, pencil, found objects of different sizes, all too big to swallow, such as palm-sized stones, leaves, sticks, cups · SDG 4, 5 · EN edition · Released · Nameet Potnis, author and English editor

Before you enter the room

- **We compare things, never people.** No heights, hands, shoes or bags of two children side by side, ever.
- Gather three or four things per girl, in sizes that differ a lot.
- Nothing that fits inside a ring made by your thumb and first finger. Sticks shorter than your forearm with no point, no glass.
- Sheet C is for the 60 minute session only. For 30 or 45 minutes, print Sheets A and B.

Read this once at home. In the room you only need the run sheet. Where this says "you", it means whoever is running the session: a teacher, a volunteer, an older sister.

Who it is for

- **For ages 4 to 7.** Girls who can pick up a stone and look at it. No reading, no writing and no counting are needed anywhere in this session. A girl who cannot count to twenty can do every part of it.
- **Numbers.** This is the first rung of the numbers ladder, and it sits below counting. Before a number can mean anything, a girl has to notice that two things are not alike, and have words for how.
- **Group size.** 4 to 24 girls.
- **Different levels in one room.** A four-year-old and a seven-year-old use the same objects and the same sheets, and the stretch sits inside the activity. A girl who is just starting works with two things that are very different in size, and says one word. A girl who is ahead orders three or four things smallest to biggest, hunts for something the same size as her own hand, and says why. Nobody gets a different sheet.

What you need

- Three or four found things per girl, in clearly different sizes: stones that fill a palm, leaves, sticks snapped to different lengths, large bottle caps, cups, folded paper squares, large seed pods
- One learner sheet A and one learner sheet B per girl, and sheet C as well only if you are running 60 minutes
- One pencil per girl, or one shared between two
- **Free and optional:** a flat surface, which can be a desk, a mat, a cloth or swept ground
- **Nothing here costs money.**

Gather the objects before the session if you can. If you cannot, the first stretch becomes the gathering stretch and the session still works. Pick sizes that differ a lot. Two stones that are nearly the same are a hard question, and they belong in the middle of the session, not at the start.

Why the session is shaped this way

We compare things, never people. This is the one rule to hold all the way through, and it is worth saying aloud to the group in the first minute: "Today we are comparing stones and sticks and cups. We are not comparing each other."

A session about big and small can turn into a room where children are ranked by height or size within a minute. So nothing in this pack asks a girl to stand back to back with another girl, to compare hands with a neighbour, to compare shoes that belong to two different children, or to say who is the tallest. Comparing her own hand to a stone is fine, because her hand is hers and the stone is the thing being measured against it. Comparing her hand to another girl's hand is not, and it is not a small difference.

If a comparison of children starts anyway, and it will in some rooms, do not tell anybody off. Say one sentence, "We compare things, not people", put two objects in front of the girls who started it, and carry straight on. Keep things that belong to a child out of it altogether. A shoe, a bag or a water bottle stops being a neutral object the moment the room knows whose it is, so use a stone instead.

The words are the teaching. Bigger, smaller, the same. Every girl should say each of them out loud many times before she leaves. When she points at an answer, or says "that one", ask again: "Say the word." Say the words yourself far more than feels necessary, because for some of the room this is the first time these words have had a job.

Ends level, then look. Two things side by side, bottoms on one line, then look. That habit is the whole point of the session and it is what protects her later. A thing that is nearer, or higher up, or lying flat, looks bigger than it is. Bringing the two together and levelling them takes the trick away. Model it slowly, twice, and keep doing it beside every girl you kneel next to.

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Direct comparison comes before measuring. Nobody uses a ruler, a string or a tape today, and nobody counts anything. Putting two things together and looking is a complete method, and it is the method the measuring ones are built on. If a seven-year-old reaches for string, let her use it after she has answered by looking, not instead of looking.

The same is the hard one. Bigger and smaller arrive quickly. The same takes longer, because two things are rarely exactly alike and a four-year-old will often insist that one is bigger. Give her two things that really do match, such as two large caps or two squares torn from one folded sheet, and level them under her eyes. Accept "nearly the same" as a correct answer, because it is one.

Three things make the stretch. Ordering three is not just harder than ordering two, it is a different job: she has to compare twice and hold the first answer while she makes the second. Some girls will lay three out in no order and be happy. Ask her to show you the smallest, take it out, and ask again for the smallest of the two left. That builds the line without you building it for her.

Bodies are allowed and legs are useful. The hunt stretch stands the room up and sends it looking for something bigger than her stone and something smaller. Walking to a thing, picking it up and bringing it back is how a four-year-old holds an idea still.

Including everyone

A girl who cannot yet read. This session asks her to read nothing. The words on the sheets are read aloud by you, once, pointing at each word as you say it, and she puts her mark on the one she means. Everything she produces is a drawing, a mark, a pointed finger or a spoken word. Write her name on the sheet for her as you hand it out, before she has to ask. Saying the three words aloud is the whole skill of this pack, and she can do all of it at the same standard as anyone in the room.

A girl who joins late. Put two things in her hands at the door and say one sentence: "Put them side by side, bottoms level. Which one is bigger?" That is the whole task and it needs none of the earlier steps. She joins the stretch the room is already in. Do not walk her through what she missed, and do not ask her in front of the others where she was.

Boys in the room. Boys do the same activity with the same objects and the same sheets. Two things keep the session centred on the girls, and neither sends anybody out: the girls hold up their things and say their sentence first in the closing circle, and you watch that the quickest voice does not answer for the child next to him. Watch the objects too. If one child has gathered the best things into his own pile, redistribute them without comment and give him the job of carrying the spares.

If it goes wrong

She answers from where the things are lying. She says the far stone is smaller, or the one on the low step is smaller, and she is reading the view rather than the objects. This is the most common thing that happens and it is not carelessness, it is how eyes work. Do not tell her she is wrong. Pick both things up, put them down together in front of her with their bottoms on one line, and ask again. Let her change her answer without any remark from you. Then hand both to a second girl and let her do the levelling herself.

Everything is "big". A girl uses one word for everything, or answers every question with "big", including for the smaller thing. Give her two things that are very far apart in size, one tiny and one that fills her hand, and ask for the small one only: "Give me the smaller one." Asking her to hand you a thing is easier than asking her to say a word, and it shows you what she knows. When she hands you the right one, say the word for her, then ask her to say it back. Build up to a pair that is closer in size over several turns.

Adapting it

- Use whatever the ground gives you. Palm-sized stones, leaves, sticks, large caps, cups, folded paper and large seed pods all work, and mixing them is fine. Two things made of different stuff still compare.
- Use the words your girls use at home for bigger, smaller and the same. Say the English words as well if English is what they are learning, but never make a girl wait for the English word before she may answer.
- Where the ground is windy or sloped, use folded paper squares and stones rather than leaves.
- A group of four can do the whole session in one circle with the objects in the middle.
- If a girl wants to compare heavier and lighter, or longer and shorter, she has found the next rung. Let her, and keep the sheets about size.

Running it shorter or longer

30 minutes. 0 to 4 two stones and two words, 4 to 11 side by side and ends level, 11 to 18 the hunt, 18 to 25 the line of three, 25 to 30 hold it up and say it. This is the real version for a new group and nothing in it is cut down. What it gives up is the second hunt and a slow closing circle, so a quiet girl may not get her turn to hold something up and say her sentence. If you have a quiet girl, start the circle with her.

45 minutes. 0 to 6 two stones and two words, 6 to 17 side by side and ends level, 17 to 26 the hunt, 26 to 38 the line of three, 38 to 45 hold it up and say it. The extra minutes go on saying the words, not on new

work. Every girl gets asked "which is bigger" at least three times, and the line of three gets a second round with three new things. Sheet C stays for the 60 minute version.

60 minutes. 0 to 8 two stones and two words, 8 to 22 side by side and ends level, 22 to 34 the hunt, 34 to 50 the line of three, 50 to 60 hold it up and say it. Use this length only with a settled group that already sits for half an hour. The extra time adds Sheet C, a second hunt for something the same size as her own hand, and a line of four on the back of Sheet C. Sheet C is the only extra page, and it is the same job done against her own hand, because a longer session at this age means more handling and more saying, not new content.

Closing, in every version. Go round the circle. Each girl holds up two of her things and says one sentence: "This one is bigger", or "These two are the same". Saying the same sentence as the girl before is allowed and is not worth a comment. Then hold up two things yourself, ask the group which is bigger, and let them answer together in one voice, which sends everybody out having said it.

Keeping it safe

Sizes differ a lot in this session, which means some objects will be small. Nothing goes in the mouth. Before you hand anything out, check it cannot fit inside a child's mouth: if it fits inside a ring made by your thumb and first finger it is too small for this room. Seeds, beads, coins and small bottle caps are out. Count what you handed out back in at the end. Sticks shorter than your forearm with no point on them, stones that fill a palm, cups that are not glass. The smallest thing in the room should still be too big to swallow.

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Key and facilitation cues

Answers and what to say, Bigger, Smaller, Same

Answers

There is no answer sheet in this pack, because the answers depend on the things in each girl's hands, and because almost everything she produces today is said aloud or drawn. What you are listening for is the word, and what you are watching for is the levelling.

One thing is worth holding on to: a comparison is correct when it matches the two real objects in front of her, even when her drawing does not look like either of them. Judge the comparing, never the drawing.

A sheet is finished when:

Sheet	Finished when
A	Something drawn in each box, the bigger thing in the bigger box, and one of the two words marked. The trace line may be empty
B	Three things drawn in an order, and the order matches the line she made on the table
C	A hand drawn around, and one of the three words marked. It is for the 60 minute clock only, and is not expected in 30 or 45

Say the swap out loud. Palm-sized stones, leaves, sticks, large caps, cups and folded paper all do the same job. Use what is on the ground where you teach, and use the words your girls use at home for bigger, smaller and the same.

What you might see

What is on the page	What to offer next
Both boxes on Sheet A filled with drawings of about the same size, and the two real things clearly different	Nothing on the page needs changing. Put the two real things in front of her, level, and ask which is bigger. The words are the work, not the drawing
Sheet A finished, and THE SAME marked when the two things are not alike	Hand her two things that really do match, level them under her eyes, and let her mark a second sheet or the back of the first. The same is the last of the three words to arrive
Sheet B drawn in the order she made, and Sheet A finished	Sheet C, then a line of four on the back of it. Then ask her to find something bigger than everything already in her line
Sheet B drawn with three things in no order	Take the smallest out with her, then ask for the smallest of the two that are left. Building it twice with objects beats correcting the drawing
Almost nothing on the page, and she answered aloud all session	She has done the pack. Write one of her own words under her box if she wants it written, and leave the rest

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Sticky points

What happens	What to say or do
She answers from across the table, where the far thing looks smaller	Bring both to her, bottoms on one line, ask again. Let her change her answer with no remark from you
She points, or says "that one", instead of saying a word	"Say the word for me." Wait. If nothing comes, say the word yourself and ask her to say it back
Every single thing is "big"	Ask her to hand you one: "Give me the smaller one." Handing is easier than saying. Then say the word for her and ask her to say it back
She will not accept that two things are the same	Two large caps, or two squares torn from one folded sheet, levelled in front of her. Accept "nearly the same", because it is true
She lines three things up by their tops instead of their bottoms	Slide them all down to one line with her, then ask again. Show, do not explain
Two girls start comparing themselves, or their hands, or their shoes	"We compare things, not people." Put two objects in front of them and carry straight on. Say nothing else about it
She wants to use string, a stick or a ruler to measure	Ask her to answer by looking first, then let her check it her way. Measuring is the next rung and she has found it
She says her drawing is wrong or ugly	"It is your stone, and nobody else has that one." Then ask her which is bigger, and let that be the answer that counts
She cannot write her name	You write it as you hand the sheet out, before she has to ask

Say "put them together and look", never "look properly". Say "say the word", never "you know this one". Never hold up one girl's sheet as the good one: if the group needs to see something, put two objects on the floor in the middle and level them yourself.

We compare things, never people. This holds for you as well as for the girls. Do not use a child as an object in an example, do not line children up by height to show the idea, and do not say which girl's hand is biggest, even kindly. There is always a stone that does the job.

After the session

Keep the objects in a bag or a tin so the next numbers session starts without gathering, and keep a few pairs that really match, because those are the hardest ones to find in a hurry. Sheet A tells you at a glance who to sit beside next time: look for the sheets where the bigger thing went in the smaller box, and start that girl with two things that are very far apart in size.

Nothing in this pack is graded, counted or reported. The next rung is counting, and a girl who can order three stones is ready for it.

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