Spatial Awareness Exercises

The pages that follow are the stimuli for 8 types of exercises. These are especially useful for the child who has trouble telling the difference between b and d, or telling the difference between p and q. They also are especially helpful for the child who reads or writes words or other letters backwards. They are useful for learners who have difficulties with right-left distinctions. But they are probably helpful for most beginning readers. The notion is that these are exercises in “spatial awareness,” a skill that is to vision what “phonemic awareness” is to hearing.

The exercises are as follows.

1. Same or different with pictures.
2. Same or different with b-d and p-q.
3. Which letter is at the left or right (of a three letter word)?
4. Which side of the word is this letter on?
5. Which picture is not like the others?
6. Which letter is not like the others? with b-d and p-q
7. Is the ball at the left or right of the stick (with b-d, p-q).
8. Name the letter or say the sound (with b-d, p-q).

Same or Different With Arrows

Here the learner looks at pairs of arrows, and says whether they are pointing in the same direction, or in different directions. This is the “entry level” spatial awareness exercise; most learners will not find it difficult. The only tricky part comes with arrows like this:

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which are pointing in different directions, even though they could be pointing at the same little object right between the arrows. You can explain to the learner that if you keep following the arrow on the left, you’ll wind up in a different place than if you keep following the one on the right, and thus we say they’re going in different directions. You can also show the learner pairs of arrows like

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and like

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left and right with arrows

In this exercise, the learner looks at one arrow and simply says whether it is pointing to the right or the left. Since the number of the item in this exercise is always to the left of the arrow, a learner can remember which is right and which is left by the phrase “right away”: the arrows pointing to the right point away from the numbers, whereas the arrows pointing to the left point toward the numbers. If you do this exercise to the criterion of fluency, that is when the learner can do it quickly and automatically, the rest of spatial awareness will be much easier.

same or different with pictures

In this exercise the learner looks at pairs of pictures, and says whether they are exactly the same, or whether they are different. The pairs of pictures in a section to come are made for this exercise. You will notice that some of the pictures are identical. Some have been “flipped” horizontally, so that one picture is the mirror image of the other. (The mirror image relationship is the same as that between b and d, and between p and q.) For some of these pictures, the differences are clear; for others the differences are more subtle. All of these pictures give the learner practice in distinguishing a picture from its mirror image.

With this and all other spatial awareness exercises, the goal is not just to do them. The goal is to become able to do them very quickly. Almost instant answers are eventually desired. If the learner has to take a while to decide which is which, he or she will be too slowed down in the process of reading.

same or different with b-d or p-q

This exercise is just like the same or different with pictures exercise, only in this exercise the learner is presented with pairs of letters, for example b and d. The learner’s job is to say whether the two letters in the pair are the same or different.

which letter is farthest left or right (with three letter words)

In this exercise, you use the three letter words provided to ask questions like this: “What’s the name (or the sound) of the letter that’s farthest left (or right) in that word?” So for example, if the word is get, you would ask, “What’s the name of the letter that’s farthest right?” The answer would be t. If you ask, “What’s the sound of the letter that’s farthest right,” the answer would be tuh. If you’re working on letter sounds, you can use this...
exercise to drill on letter sounds while at the same time working on left-right distinctions.

Which Side of the Word is This Letter On? (With Three Letter Words)

In this exercise, you still use the three letter words presented in this section. Now rather than giving a side and asking for the letter name or sound, you give a letter name or sound and ask which side it’s on. So for example, if the word is get, you would say, “In that word, find the letter g. Is that on the left, or on the right?” Or, you can ask, “In that word, there’s a letter that says guh. Is that on the left, or the right?”

Which Picture Is Not Like the Others?

This exercise is done with the sets of three pictures in this section. The three pictures in each set are identical except that one of them is flipped around its axis -- usually flipped horizontally. (The first couple of pictures are flipped to create an upside-down drawing.) The task of the learner is to say which of the three pictures is not like the other two. Is it the drawing on the left, on the right, or in the middle?

This exercise gives a workout to the part of the brain that tells left from right. Left-right orientation is involved both in finding the odd picture out and in deciding what to call it.

Which Letter Is Not Like the Others?

This exercise is done with sets of three letters, b’s, d’s, p’s, or q’s. This is done in exactly the same way as Which Picture Is Not Like the Others, only now rather than using drawings, we have sets of three letters. The learner tells which of the three is not like the others, answering left, right, or middle as before.

Is the Ball At the Left or Right of the Stick?

This exercise is done with single letters, b, d, p, or q. You explain to the learner that the letters b and d and p and q are made of a ball and a stick. For b and p, the ball is on the right side of the stick. For d and q, the ball is at the left side of the stick. In this exercise, the learner looks at these letters and simply says whether the ball is at the right or left of the stick. When the stimulus is b, the learner just says “right,” because in b the ball is to the right of the stick.

Remind the learner that we are talking of where the ball is, not where the stick is; do this by asking, “Which side is the ball on?”
Name the Letter or Say the Sound (with b, d, p, q)

This exercise is done with the same set of b’s, d’s, p’s, and q’s included in this section. The learner looks at each one and says what the letter is. The nonsense mnemonic “bright pright” can help some learners remember that for b and p, the ball is on the right. You get this by putting b and right together to get bright, and by put p and right together to get pright, (even though pright isn’t a real word). An alternative way to do this exercise is to ask the learner to say, not the name of the letter, but the sound of the letter. So in this exercise the learner is going down the list and saying buh, duh, puh, or quuh.

When the learner can do these exercises very fast, I think you will find that he or she is much better equipped to do the right-left discriminations that are crucial to reading.