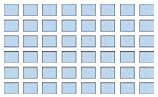
M13

AS MANY WINDOW PANES AS WINDOW FRAMES

15–20 minutes

To foster the ability to participate co-operatively in role play
To reinforce the use of mathematical language, e.g. as many as..., not as many as..., same, different, more, fewer, less, equal
To demonstrate the value of one-to-one correspondence in completing practical tasks and to use it to match two sets of objects exactly

- Greedy Gary, the Number Guzzler from M12
- Houses with different numbers of window frames
- Panes of glass 

- An area of your home/room to be the glazier's workshop – put out the panes of glass
- An area of your home/room with the houses laid out, away from the glazier's
- A box of small plastic tokens or counters
- A toy truck – for carrying tokens to the glazier's

Before the session, take time to look at different windows around your house and neighbours' houses. Point out and explain how that the windows have frames which support panes of glass, and talk about why we have them – glass needs to be supported by the frame to keep it safe from breakage, and we have glass so that we can see out but keep the heat out/cold in, and so on.

Show your child the area that you have chosen to be the glazier's workshop, and explain what a glazier is. Then show your child the houses. Explain that the builders have built the houses, but they are not quite finished. They need one more thing before they are ready for people to move in and live in them. Ask your child if they know what is missing. Encourage them to focus on the windows and help them conclude that the window frames are ready, but they have no glass in them.

Tell your child that they are one of the construction workers. Explain: *Your job is to fit the glass into the window frames. To do this you must visit the glazier to collect the panes of glass to fit in the frames. However, the houses have different numbers of window frames. The workers, that includes you, have to do one house at a time. You will need to know exactly how many window panes to collect before you visit the glazier.*

Ask your child: *What could you do to make sure that you collect exactly the right number of window panes from the glazier, as many window panes as there are empty window frames in each house?* Show them that Greedy Gary the Number Guzzler is watching to make sure they are not counting! Hopefully they will spontaneously suggest placing a counter or token in each empty window frame and then taking those counters/tokens to the glazier. If necessary, prompt them to come to this conclusion.

Give your child the box of counters/tokens. They should put one in each window frame, taking out of the box *as many tokens as there are empty window frames*. Then they close the box, place the tokens on the truck and go to the glazier.

Now you role play being the glazier, saying that they can't return any panes that are unused and so on, so that your child realises the importance of getting the right number of panes, one for each frame only. At the glazier's, your child should place their tokens in a line, match one window pane to each token, collect up the window panes, put them in the truck and return to the house. They then 'fit' the window panes into the window frames (lay them on top). Ask them to confirm that they have collected 'as many window panes as there are window frames'.

Have your child repeat the process for the other houses, or until they are able to do it confidently and independently.

Your child can match two sets of objects exactly (window panes and frames) that are physically distant from each other, using counters/tokens.
Your child participates actively and co-operatively in role play.

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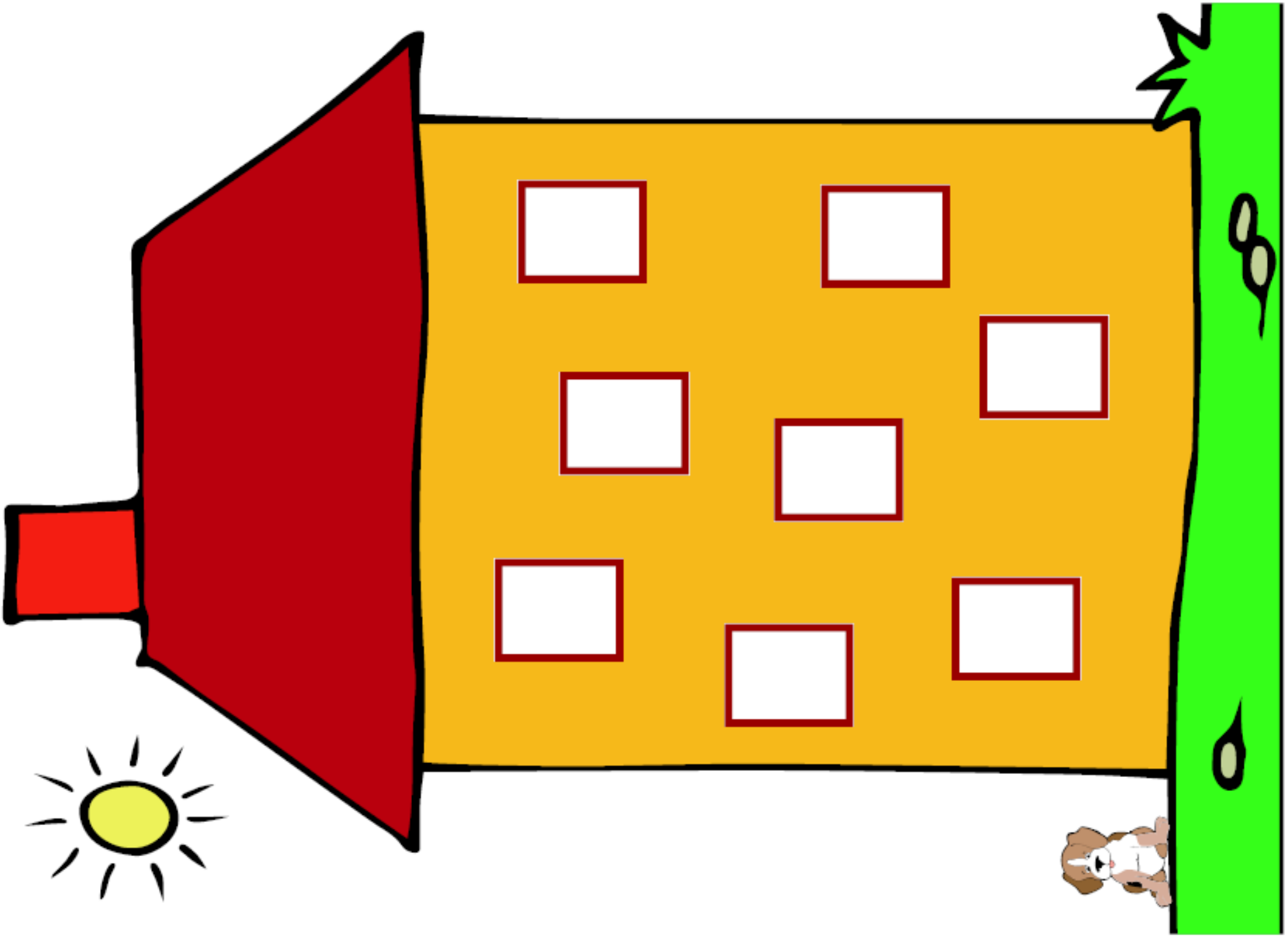

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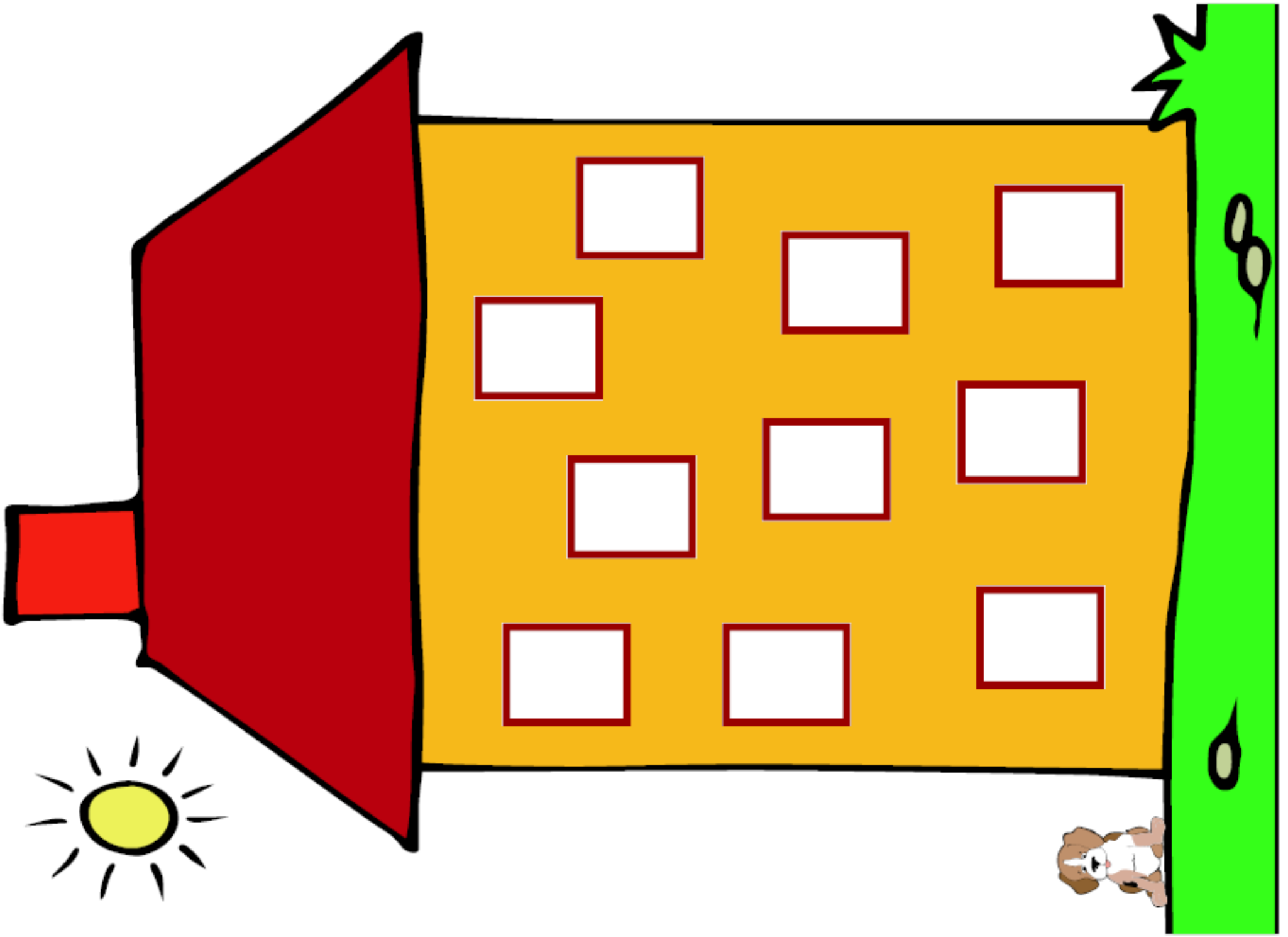

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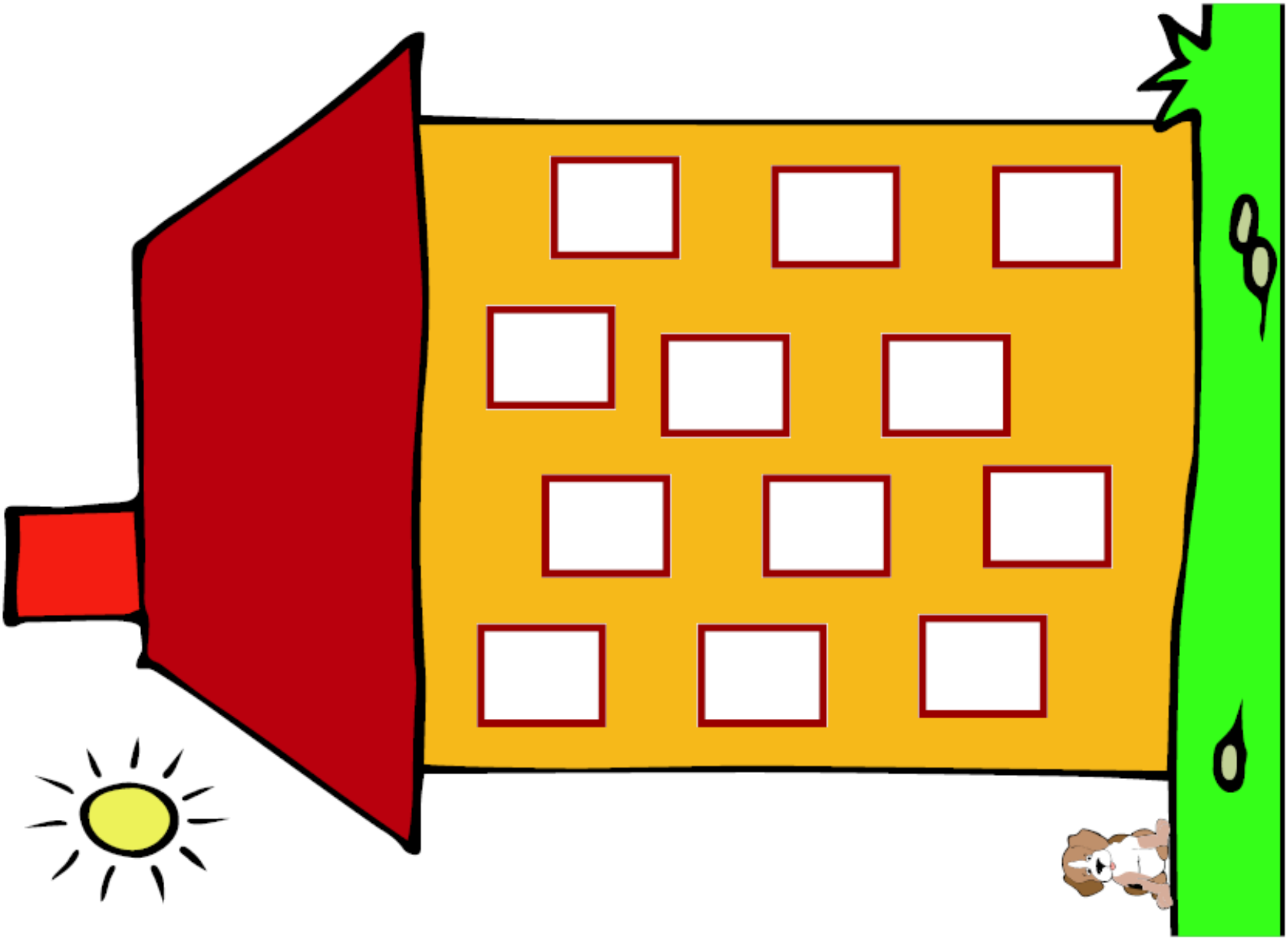

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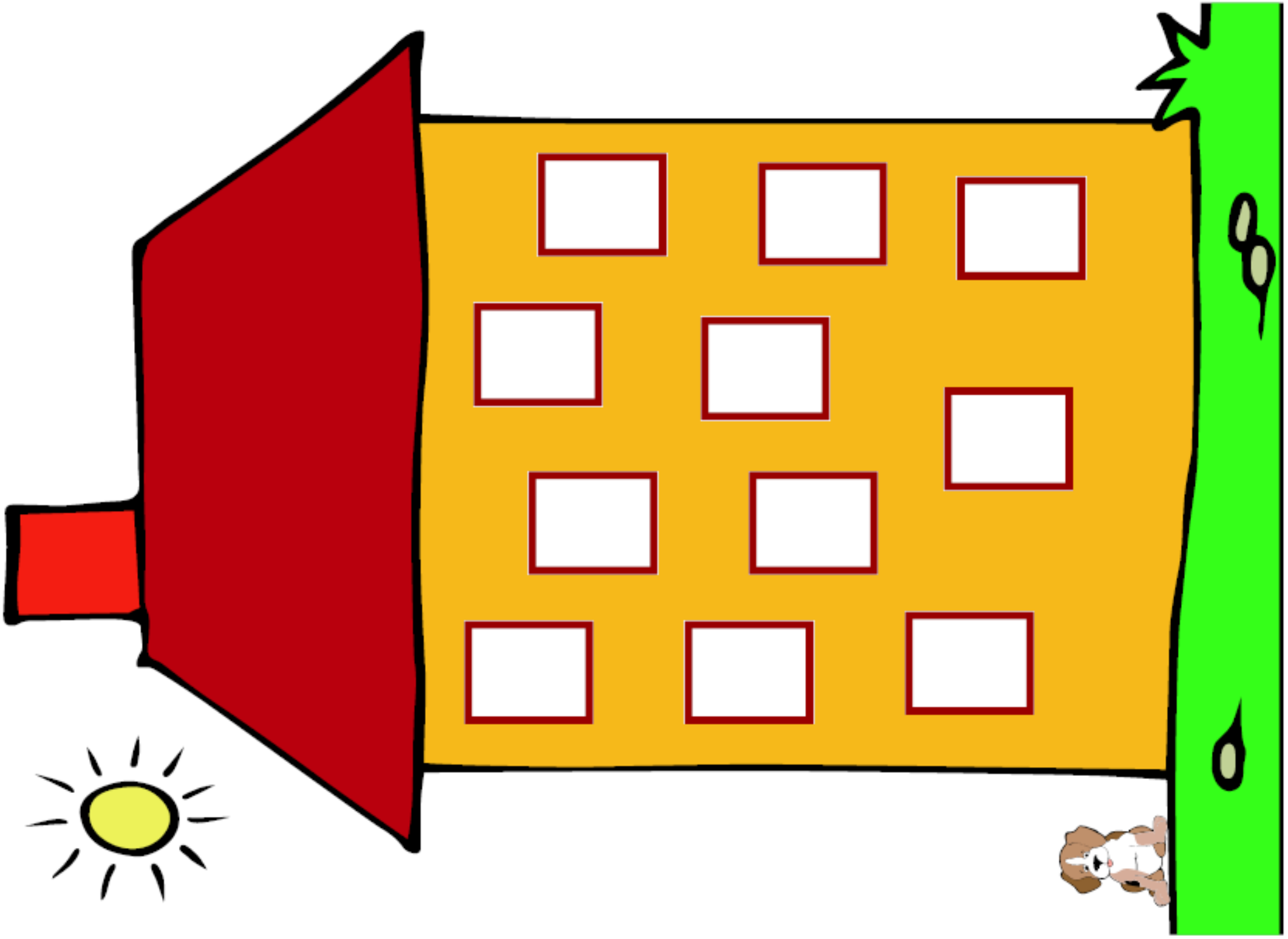

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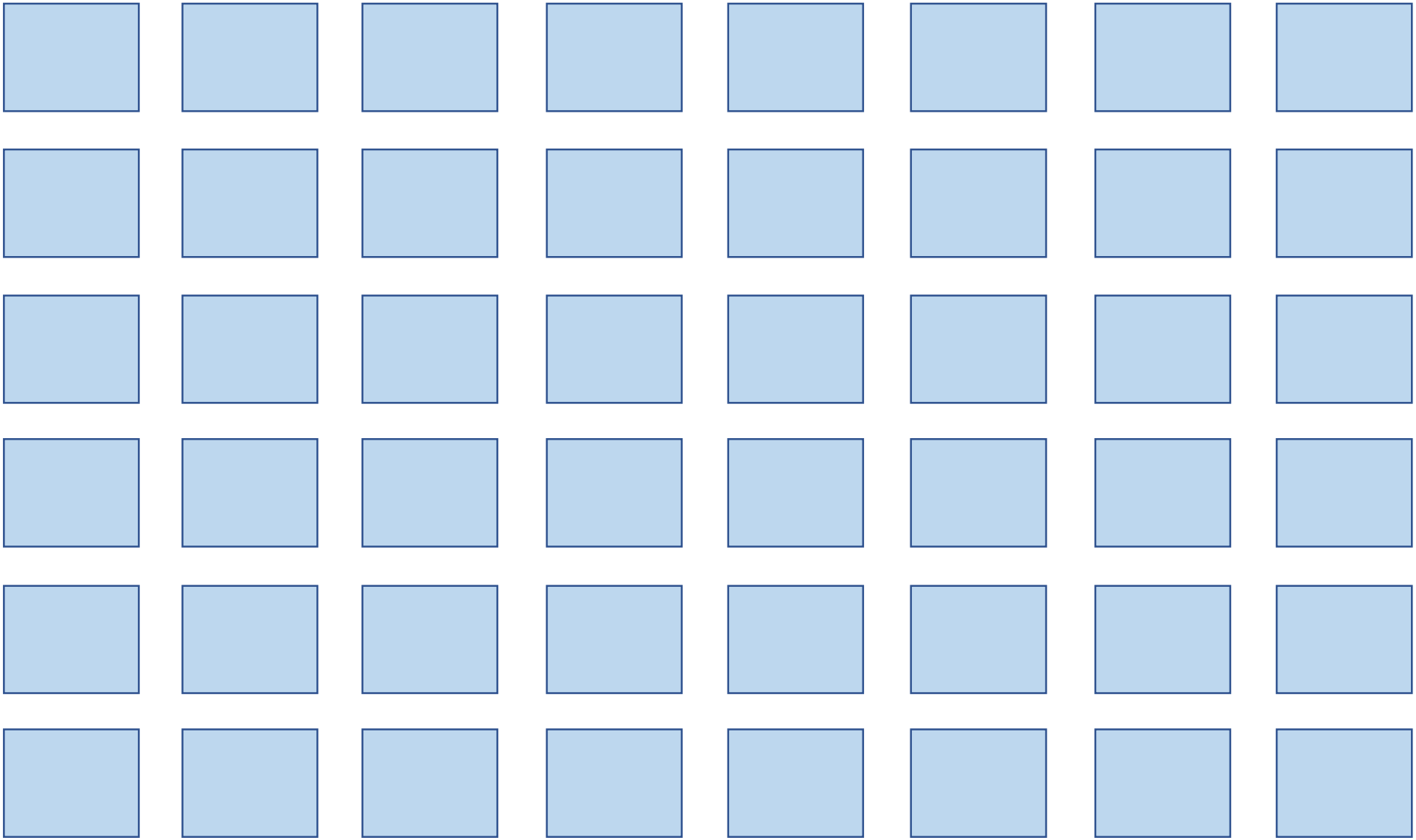
Cut out each light blue rectangle (pane of glass) separately. We've put them close together for ease of cutting.



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