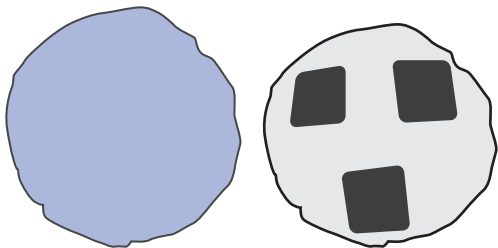


You can be a Cognitive Scientist!

Can an infant recognize a face?

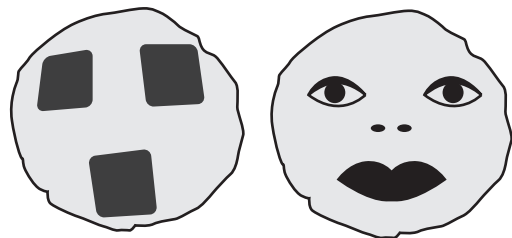
To find out, place your baby underneath the mobile.

1. Observe your baby as they look at these two pillows.



2. Which pillow does your baby seem to prefer to look at? Why do you think that might be?

3. Now, try hanging these two pillows on the mobile.



4. Which one of these pillows does your baby seem to prefer? Can you guess why your baby might prefer to look at that pillow?

Many newborns will prefer to look at the pillow with the three dark spots. Scientists think this is because, to a very young baby with very blurry vision, the pillow with the three dark spots resembles the two eyes and a mouth on a human face.

More Things To Think About and Try

Research has found that newborns will look equally as long at their mother and a female stranger if both women are wearing headscarves that cover their hairlines. Scientists think this is because young babies have blurry vision, and rely on differences in the high-contrast areas of the face (such as the hairline) to recognize people.

You can try something similar by putting on a hat or a scarf that covers your hair, and see what your baby's reaction is. Your baby might not recognize you until you speak to her – then she'll probably recognize your voice (a baby's hearing is quite good from birth). When you take off the scarf she'll see that it's you! This is exactly what some researchers did to prove that young babies rely on hairlines to recognize others.

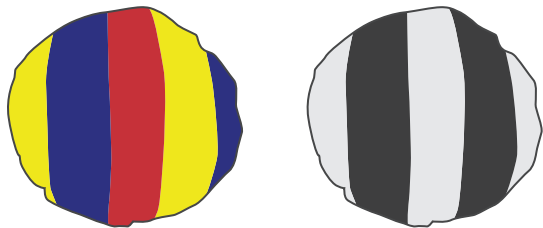


You can be a Cognitive Scientist!

Can infants see all of the colors that adults can see?

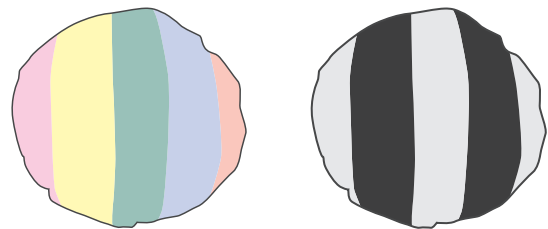
To find out, place your baby underneath the mobile.

1. Observe your baby as they look at these two pillows.



2. Which pillow does your baby seem to prefer to look at? Why do you think that might be?

3. Now, try hanging these two pillows on the mobile.



4. Which one of these pillows does your baby seem to prefer? Can you guess why your baby might prefer to look at that pillow?

In one study, scientists found that infants as young as one or two months of age could differentiate between high contrast colors (such as black and white) but could not see a difference between pastel colors until six months of age. Other studies found that babies can see differences between bright colors sooner than between pastel colors.

More Things To Think About and Try

You can try this kind of “paired comparison” study anywhere! Show your baby two different toys and see if your baby pays more attention to one than the other. For crawlers, you can put the two toys about five feet from your baby and about three feet apart. Which toy does your baby crawl toward?

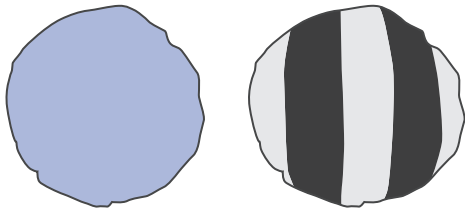


You can be a Cognitive Scientist!

How clear is an infant's vision?

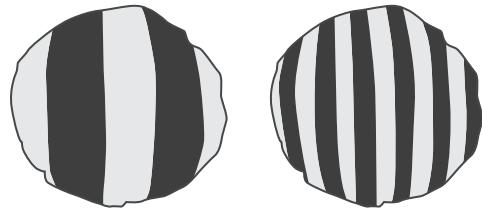
To find out, place your baby underneath the mobile.

1. Observe your baby as they look at these two pillows:



2. Does your baby seem to prefer to look at one of these pillows over the other? Why do you think that might be?

3. Now, try hanging these two pillows on the mobile:



4. Which one does your baby seem to prefer? Can you guess why your baby might prefer to look at that pillow?

The pillow your infant prefers to look at probably depends on his or her age when you try the activity, and this preference might change as your infant grows from a newborn to a six-month-old.

More Things To Think About and Try

Something striped should be more interesting to look at than something that is boring and grey, but only if you can see the stripe! To see how sharp a baby's vision is, a doctor can show a baby one object that is black-and-white striped and another that is plain grey. The doctor could start out by showing the baby a really wide stripe and a plain grey object, and the baby will probably look at the stripe because it is more visually interesting. Then the doctor can gradually show the baby objects with thinner and thinner stripes until the baby looks at the striped object and the grey object equally—this means the baby can't see the stripe anymore! An optometrist uses an "eye chart" to do a similar test with adults. Near the bottom of the chart, the lines of letters are so small and close together that we can't distinguish them anymore.

