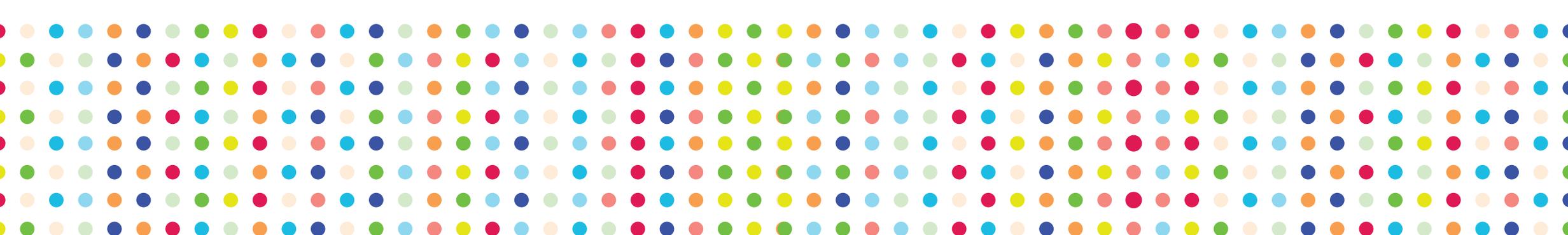


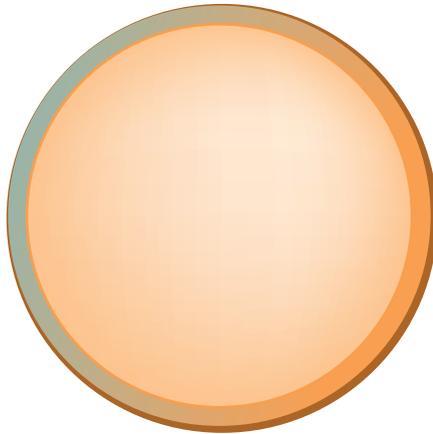
Creating Babies



Conception

CONCEPTION

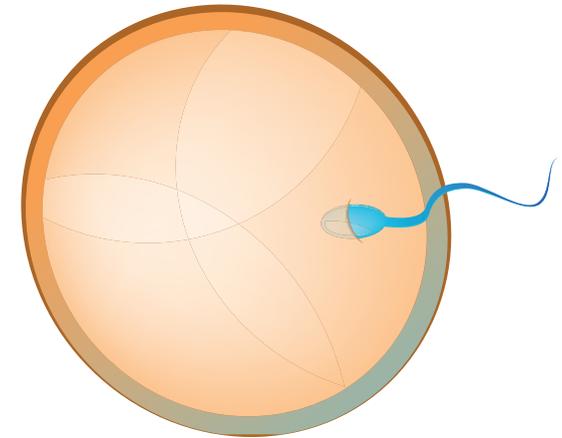
1 Egg



1 Sperm

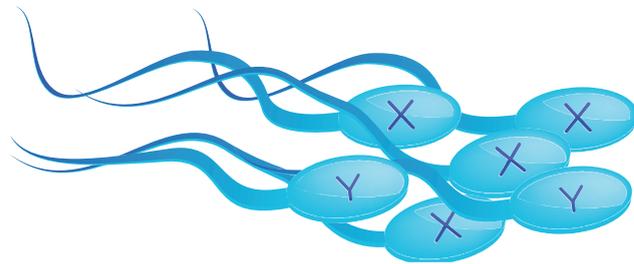
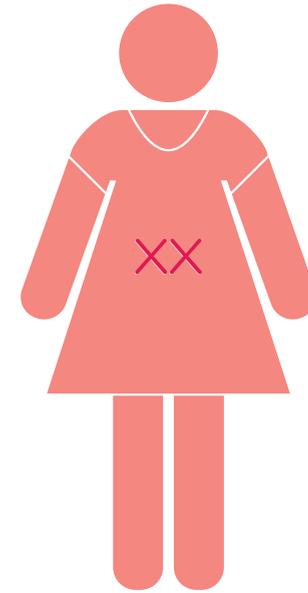
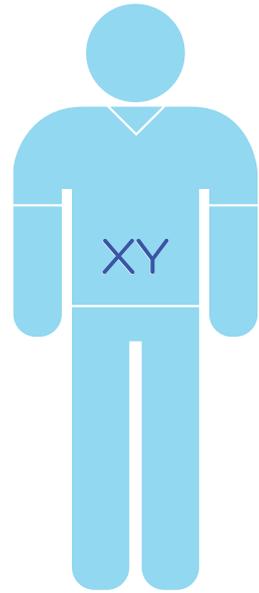


1 Fertilised egg (zygote)

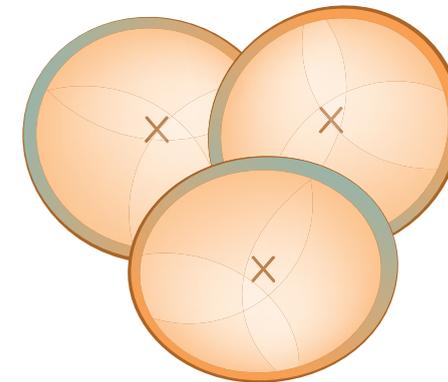


which can grow into a baby

MALE AND FEMALE SEX CELLS

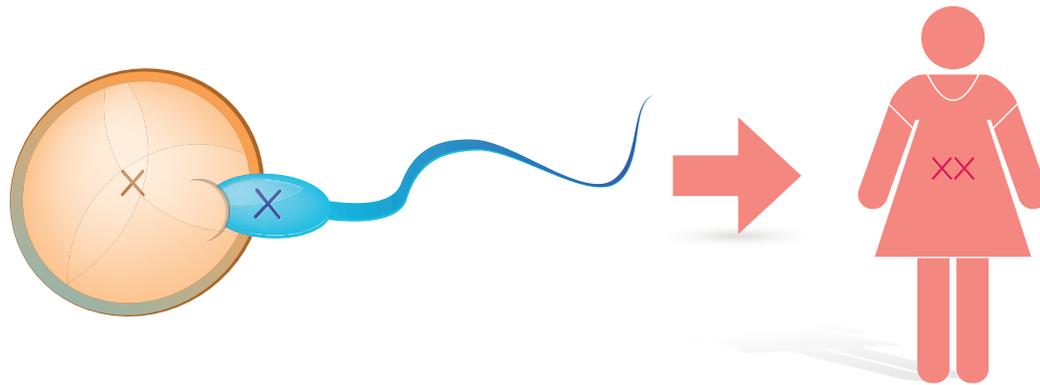


Men have cells that are XY
Sperm are half a cell and are either X or Y.

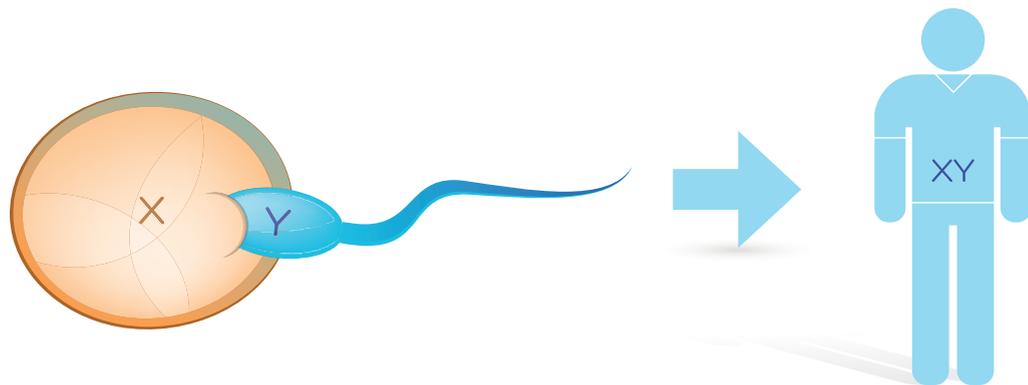


Women have cells that are XX
Eggs are half a cell and are always X.

GENDER SELECTION



If an X egg and an X sperm join together, they make a girl because the baby is XX.

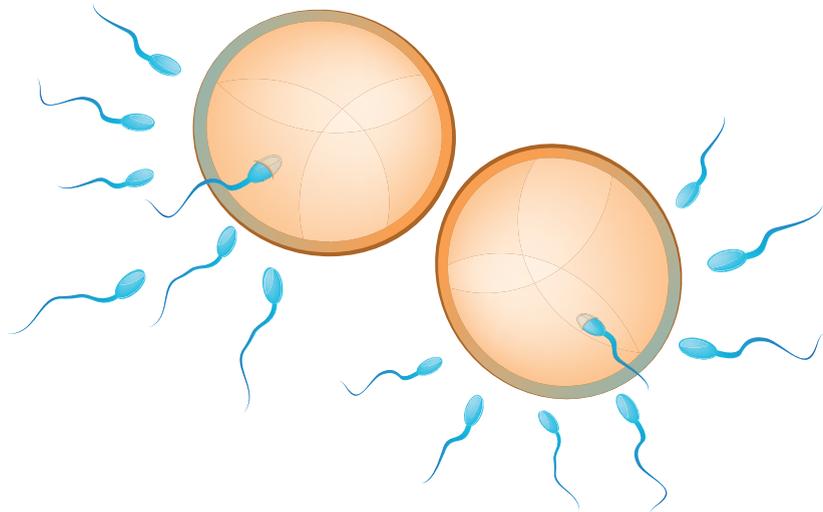


If an X egg and a Y sperm join together, they make a boy because the baby is XY.

NON-IDENTICAL TWINS

2 Eggs + A lot of sperm

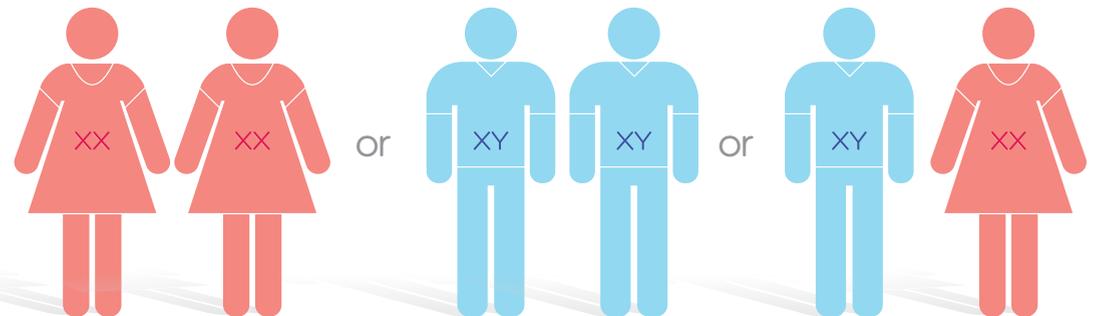
One sperm goes into one egg and another sperm goes into the other egg.



Each fertilised egg becomes a baby, but because they were made from different sperm and eggs, they won't be identical.

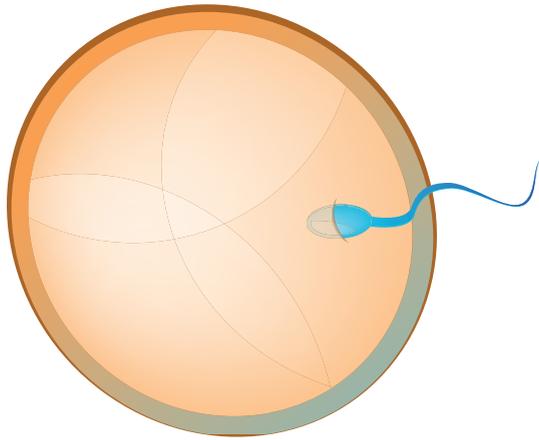
They can be...

girl + girl or boy + boy or girl + boy

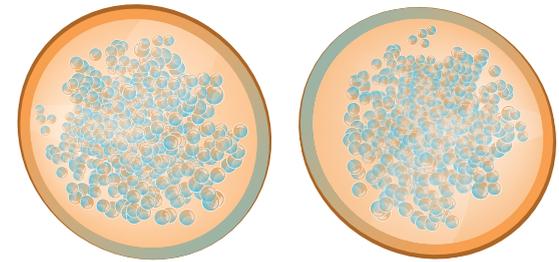
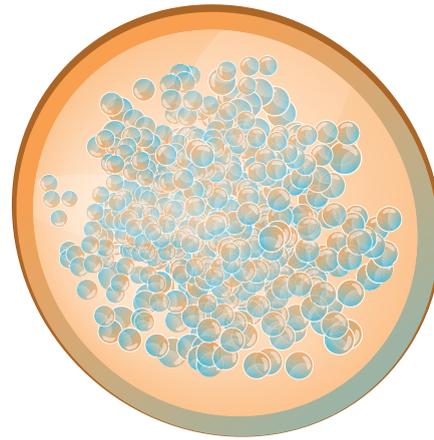


IDENTICAL TWINS

1 egg and 1 sperm

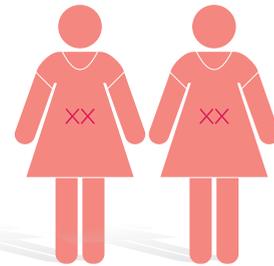


1 bundle of cells

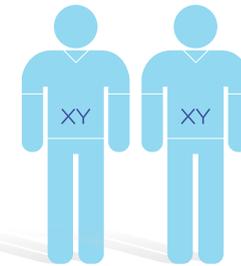


It splits into two bundles
This happens in the first five weeks.

1 bundle + 1 bundle =



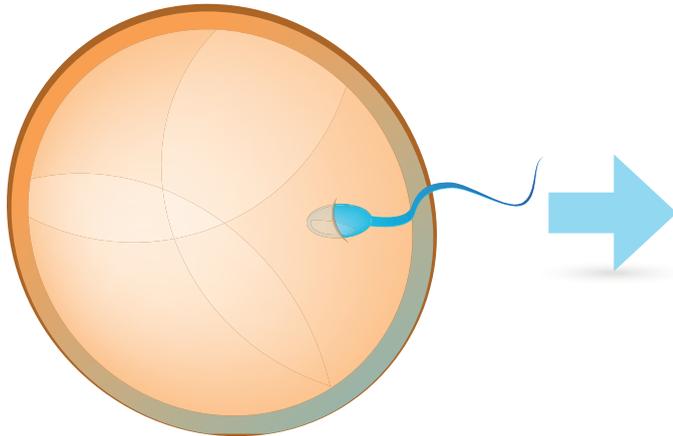
or



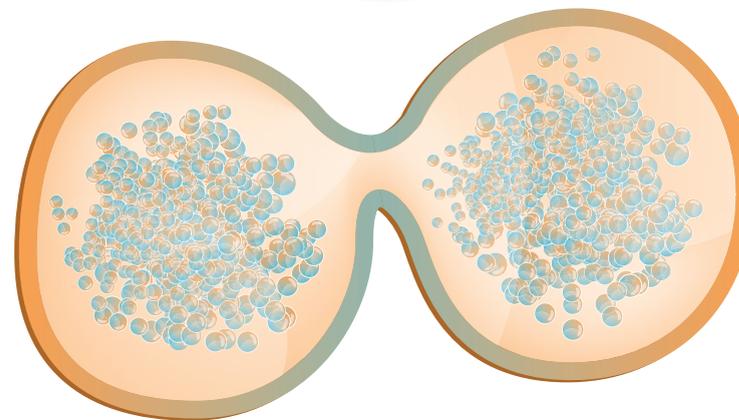
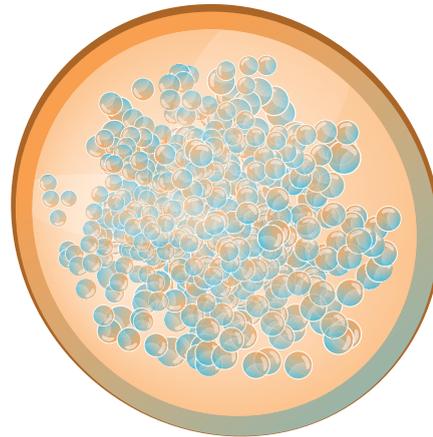
girl + girl or boy + boy

CONJOINED TWINS

1 egg and 1 sperm



1 bundle of cells



The bundle splits,
but not completely.

They will develop as
identical twins that are
joined.

The place where they are
joined will vary.

Conjoined twins are
delivered by caesarean.

DONATING EGGS

Man 1

uses his healthy sperm

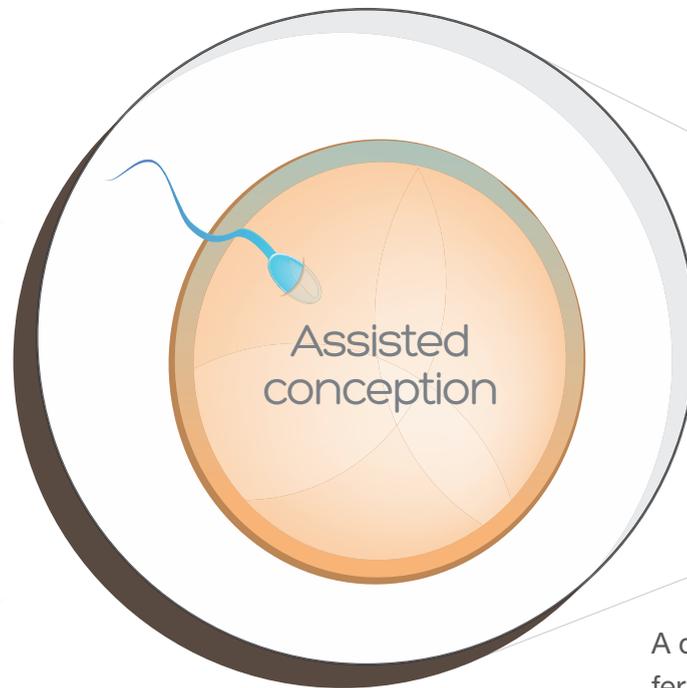


Woman 1

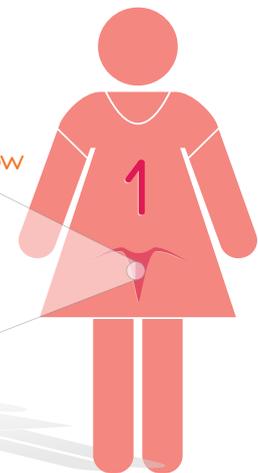
has no eggs or no healthy eggs, but she can use her own uterus (womb).

Woman 2

donates her healthy eggs



Put inside the womb to grow



A doctor takes the eggs from **Woman 2** and fertilises them with the sperm from **Man 1**.

The doctor then puts the fertilised egg/s into **Woman 1's** womb.

Hopefully, **Woman 1** is now pregnant from **Man 1's** sperm and **Woman 2's** egg.

DONATING SPERM

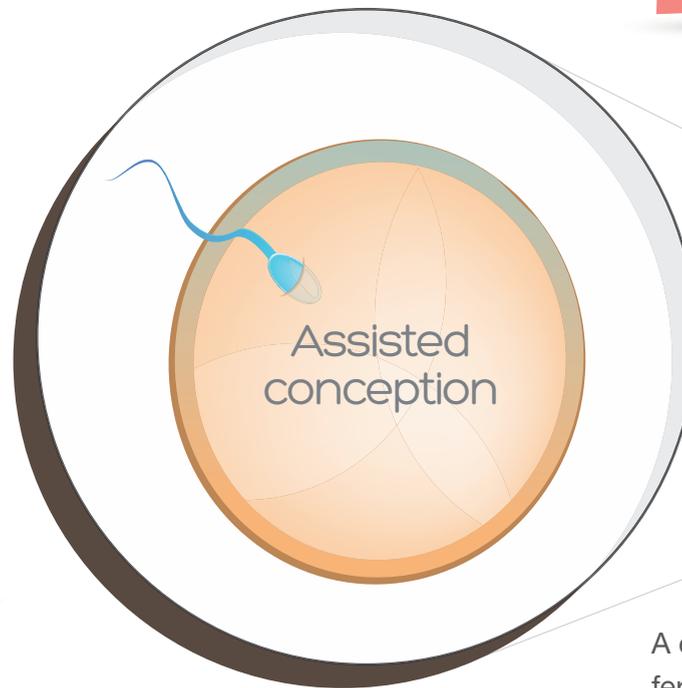
Man 1

has no sperm
or no healthy
sperm

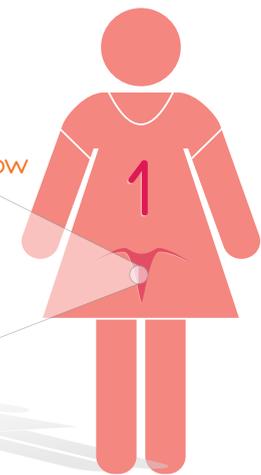


Woman 1

has healthy eggs



Put inside the womb to grow



Man 2

donates his
healthy sperm

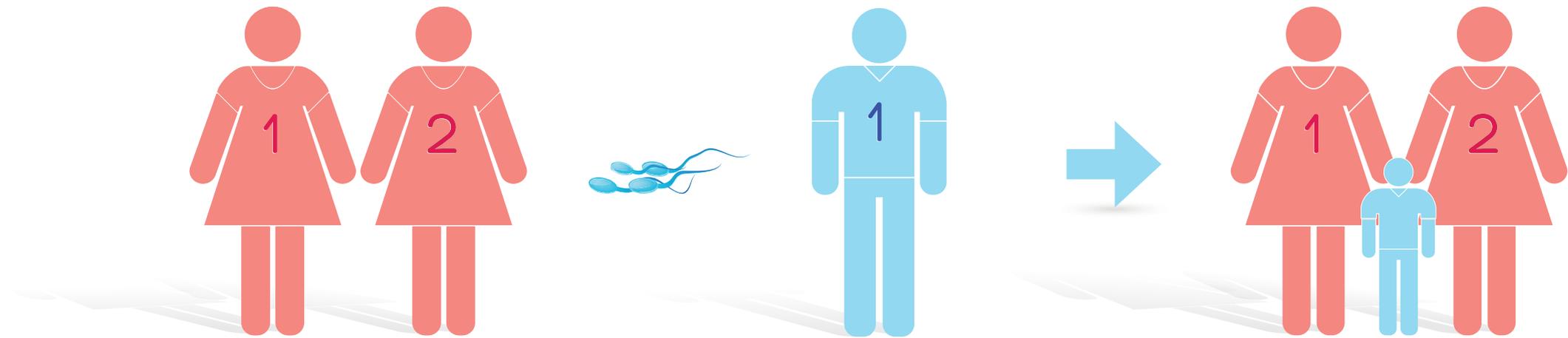


A doctor takes the eggs from **Woman 1** and
fertilises them with the sperm from **Man 2**.

The doctor then puts the fertilised egg/s into
Woman 1's womb.

Hopefully, **Woman 1** is now pregnant from **Man
2's** sperm and **her own** egg.

DONATING SPERM



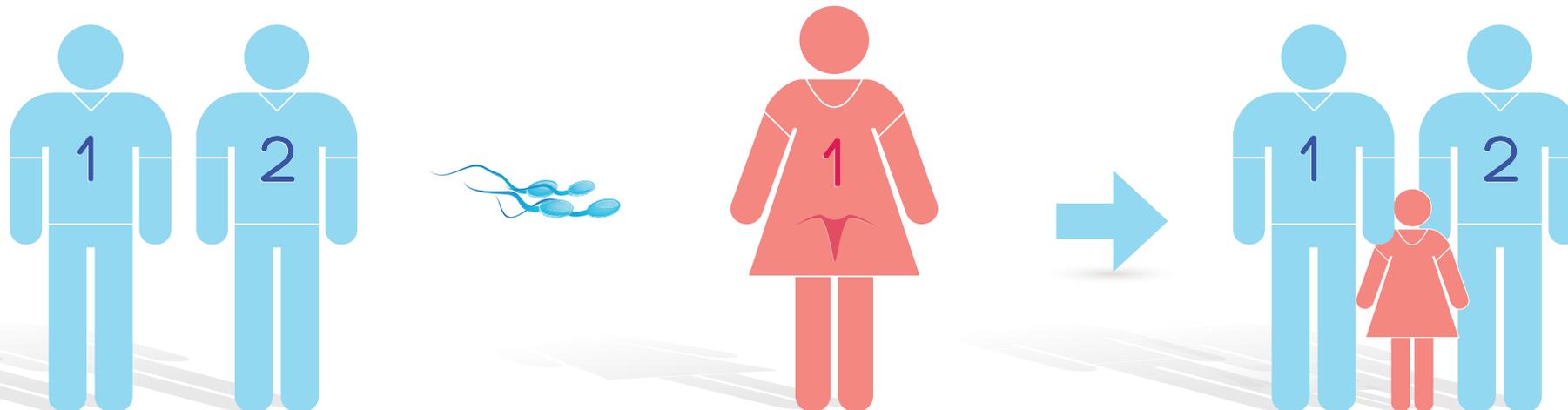
Woman 1 and **Woman 2** are in a relationship and want to have a baby, so they will need the help of **Man 1**. Either **Woman 1** or **Woman 2** may be able to carry the baby if they are healthy.

Man 1 donates his sperm

which will be put inside the vagina of the woman who chooses to have the baby.

Sometimes a doctor will help by fertilising the egg with the sperm before putting it into the woman's womb. This means the egg has to be taken out of the woman's body first, fertilised and then put into her womb.

DONATING EGGS AND SURROGACY



Man 1 and Man 2 are in a relationship and want to have a baby,

so they will need the help of Woman 1.

Sperm is needed to make a baby

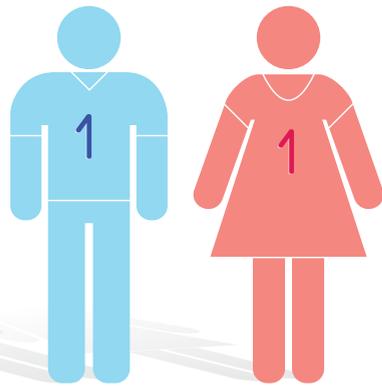
and can come from Man 1 or Man 2.

Woman 1 donates her eggs

She will use her womb to carry the baby until it is born.

Man 1 and Man 2 will raise the baby together.

SURROGACY

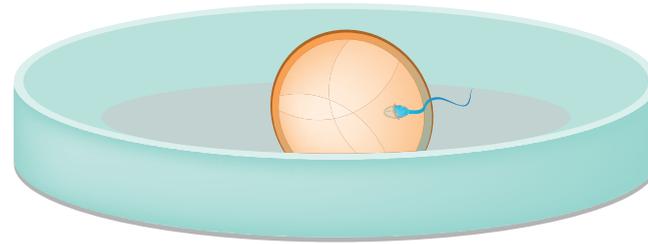


Man 1 and Woman 1 are in a relationship and want to have a baby.

Woman 1 has healthy eggs but can't use her own womb and Man 1 has healthy sperm.

They ask Woman 2 if they can use her womb to carry the baby.

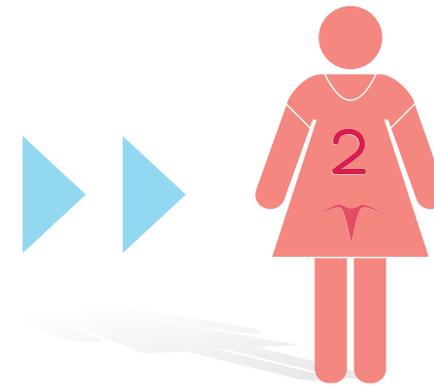
Assisted conception



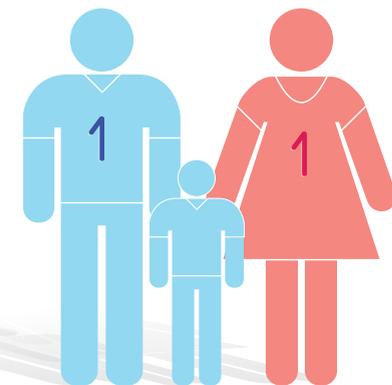
A doctor takes the sperm from Man 1 and fertilises the eggs from Woman 1

and puts them into Woman 2's womb.

Hopefully, Woman 2 is now pregnant from the sperm of Man 1 and egg from Woman 1.



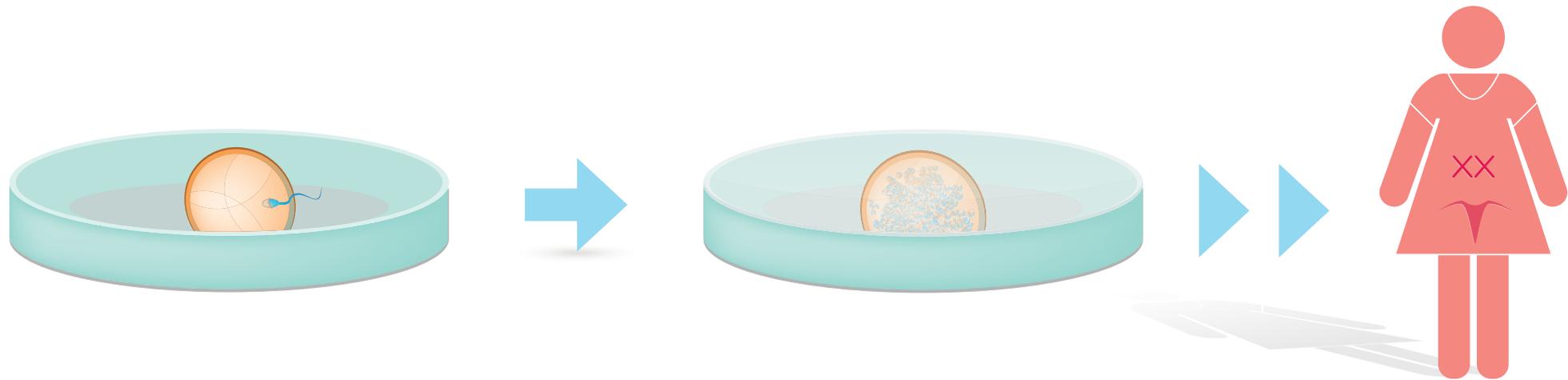
Woman 2 carries the baby until it is born. Woman 1 and Man 1 will raise it.



IN VITRO FERTILISATION

When a woman wants to have a baby and is having problems getting pregnant

a doctor can fertilise an egg (hers or another woman's), with sperm outside her body. It is then put inside her womb to grow.



| | |
|------------------------------|---|
| Assisted conception | Includes a range of reproductive technologies that can be used to increase a woman's chances of getting pregnant. |
| Conception | The fertilisation of an egg by a sperm, which is followed by implantation in the womb. |
| Donate | (medical) To allow sperm or eggs to be taken from one person's body and used in fertility treatments for other people. |
| Donor | A person who voluntarily gives sperm, eggs, blood, skin etc. to use in the treatment of another person. |
| Embryo | An unborn baby in the very early stages of development (weeks three to eight). After an egg is fertilised by a sperm, the one-celled organism that results is called a zygote. The zygote starts a two week period of rapid cell division to become an embryo. It's called an embryo until the end of week eight, after which it becomes a foetus. |
| Fertilise | The joining of an egg and a sperm, which eventually leads to the development of an embryo. |
| Fertility | The ability to conceive (have a baby). |
| Foetus | The unborn baby in the uterus (womb) after the embryonic stage. The foetal stage starts eight weeks after the egg has been fertilised, where the embryo develops into the basic shape of a newborn and all of the organs are present. This stage continues until birth. |
| Gender | A range of characteristics that distinguish between male/masculinity and female/femininity. |
| Implantation | A process that happens early in pregnancy, where the embryo sticks to the wall of the womb. |
| Insemination | The introduction of semen into the female's reproductive tract. This can happen through sexual intercourse or through use of an instrument such as a syringe in a process called artificial insemination. |
| In vitro fertilisation (IVF) | A type of reproductive technology where an egg is removed from a woman and placed with a man's sperm in a dish (in vitro). The cells join to make a single cell that then starts dividing to become an embryo. When the embryo has developed into a few cells, it's put into the woman's womb where it implants and develops as a normal embryo. |
| Ovulation | The process that happens in most women, where a mature egg is released from the ovary as part of the menstrual cycle. |
| Reproduction | The process of making babies. |
| Surrogate mother | A woman who agrees to become pregnant and carry a baby for another person or couple, who will then become the baby's legal parents. |
| Uterus (womb) | A hollow, muscular organ in the female's pelvic cavity where the fertilised egg implants and develops. |
| Zygote | After an egg is fertilised by a sperm, the one-celled organism that results is called a zygote. The zygote starts a two week period of rapid cell division called mitosis where each cell doubles by dividing into two cells. This two week stage is called the germinal period and spans the time of conception to the implantation of the embryo into the womb. |

