

Pre-Natal Development

BABY



Zygote

Embryo

Fetus

Prenatal Baby Development

- Development of the baby during the period before birth.

- Develops in three stages
 - Zygote
 - Embryo
 - Fetus

Conception

- ❑ Once a month and ovum is released
 - Ovum- A female egg
- ❑ The Egg moves through the Fallopian Tube to the uterus
 - Uterus-Where the baby develops during pregnancy
- ❑ If not fertilized it disintegrates and is flushed away with menstruation



But . . .

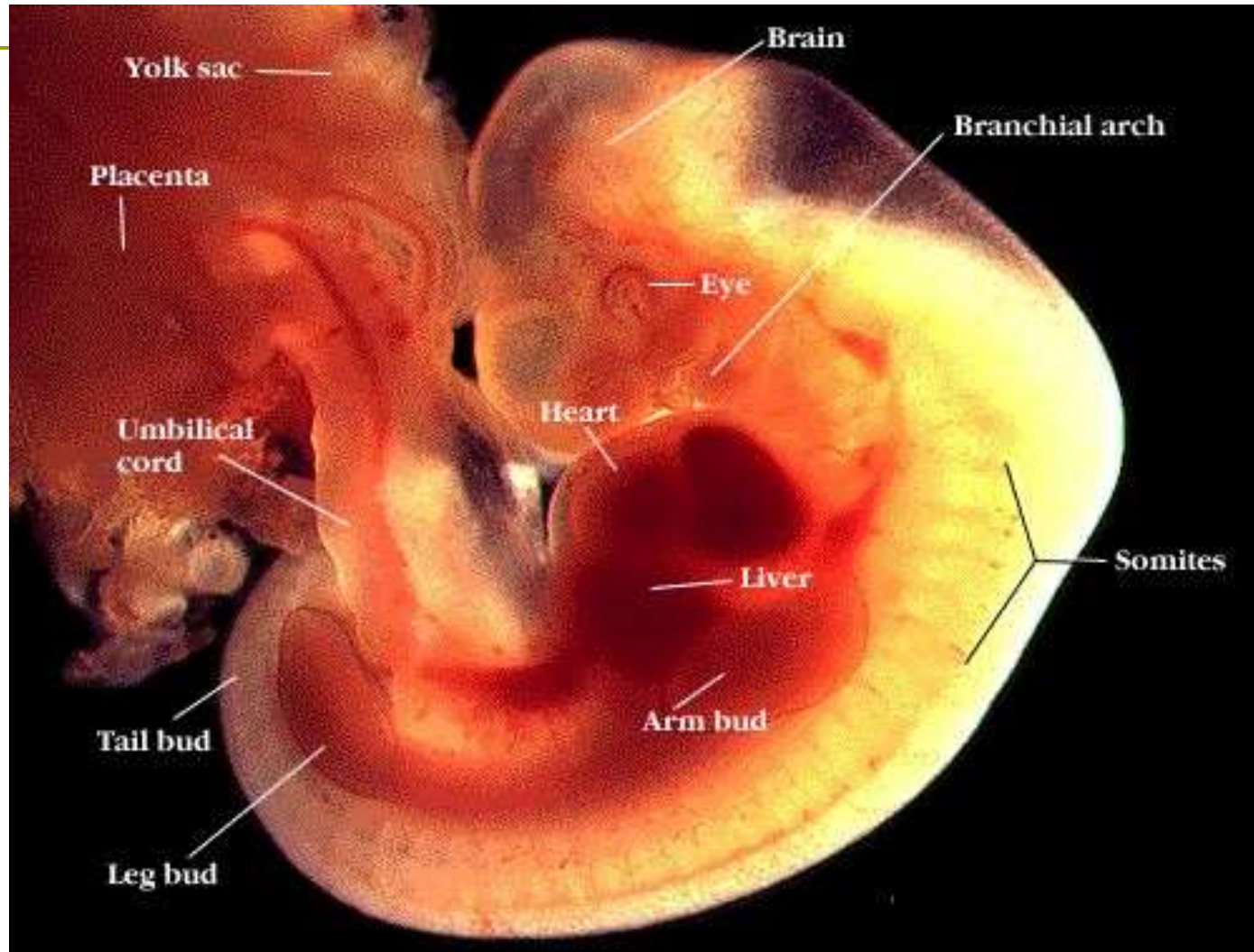
- If it is fertilized in the Fallopian Tube by a sperm—Conception occurs
- This Union is what we call a zygote!



The Zygote—Month 1

- ❑ Fertilized egg reaches the uterus and attaches itself to the uterus.
- ❑ Cell multiplication begins
- ❑ Internal organs and circulatory system begins to form.
- ❑ Cell Division takes place and at the end of two weeks the zygote is the size of a pin-head
- ❑ Heart begins to beat
- ❑ Small bumps show the beginnings of arms and legs

Parts of the Zygote





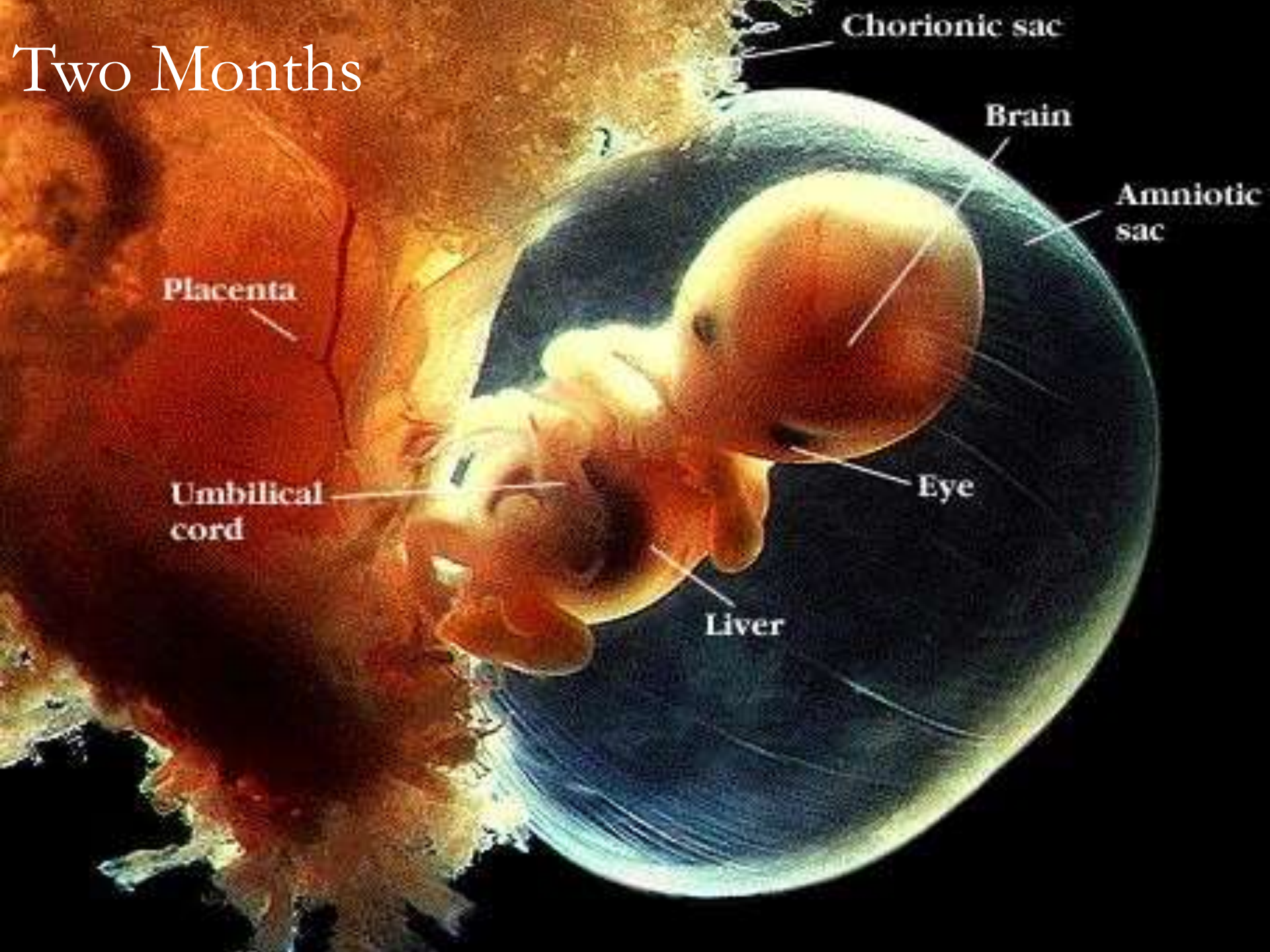
4 Weeks



The Embryo—Month 2

- ❑ At 5 weeks the embryo is $\frac{1}{4}$ inch long
- ❑ All major organ systems develop
- ❑ The placenta and Umbilical Cord develop
 - Placenta- The tissue that connects the sac around the unborn baby to the mother's uterus
 - Umbilical Cord- Tube that connects the baby to the placenta
 - ❑ Brings the baby nourishment and oxygen from the mother's blood
 - ❑ Takes away waste products
- ❑ Amniotic Fluid surrounds the baby
- ❑ Face, and limbs take shape

Two Months





6 Weeks



7 Weeks



8 Weeks



7 weeks

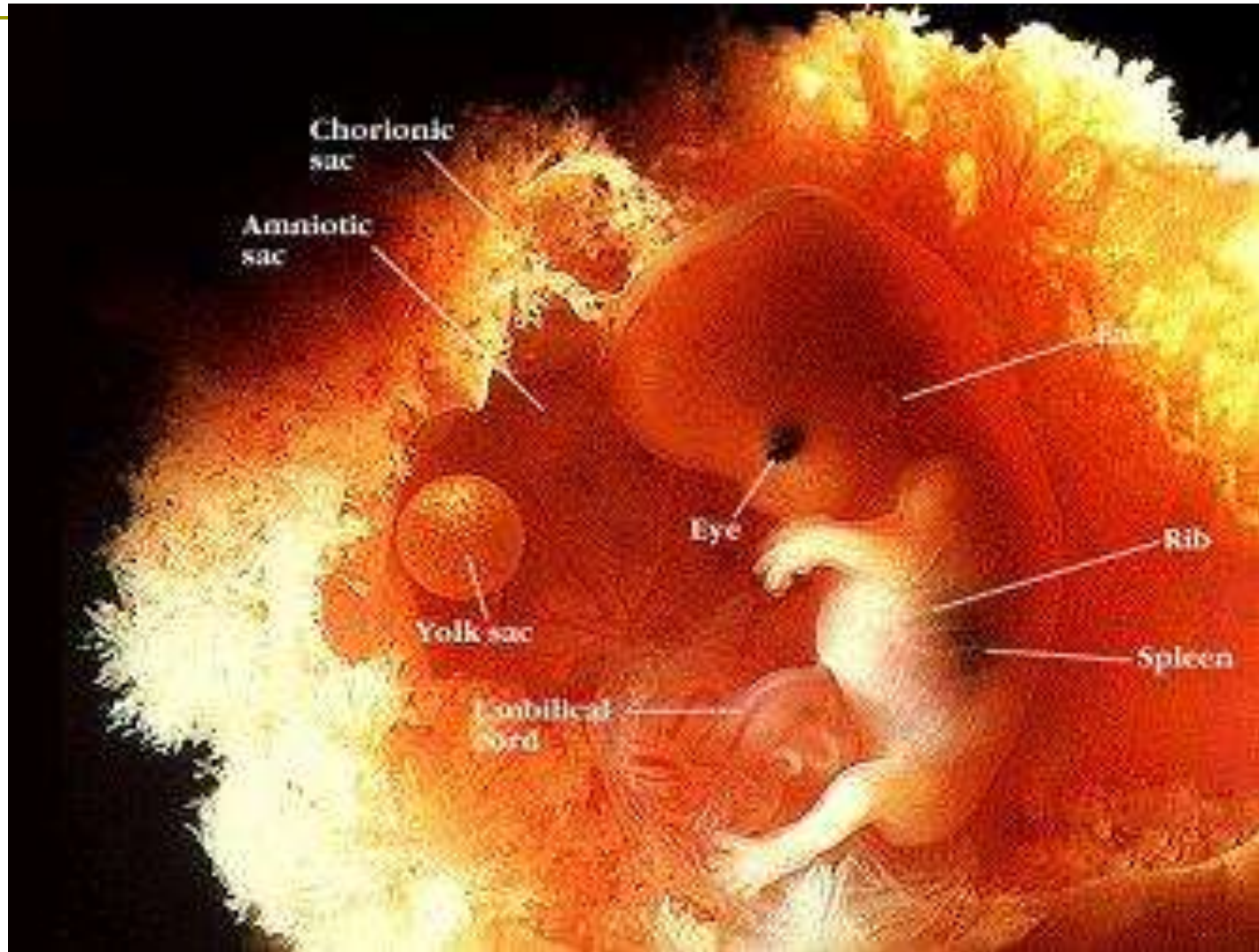


8 weeks

The Fetus—Month 3

- ❑ The fetus is about 1 inch long
- ❑ Nostrils, mouth, lips, teeth buds, and eyelids form
- ❑ Fingers and toes are almost complete
- ❑ Eyelids are fused shut
- ❑ Arms, legs, fingers, and toes have developed
- ❑ All internal organs are present—but aren't ready to function
- ❑ The genital organs can be recognized as male or female

3 Months





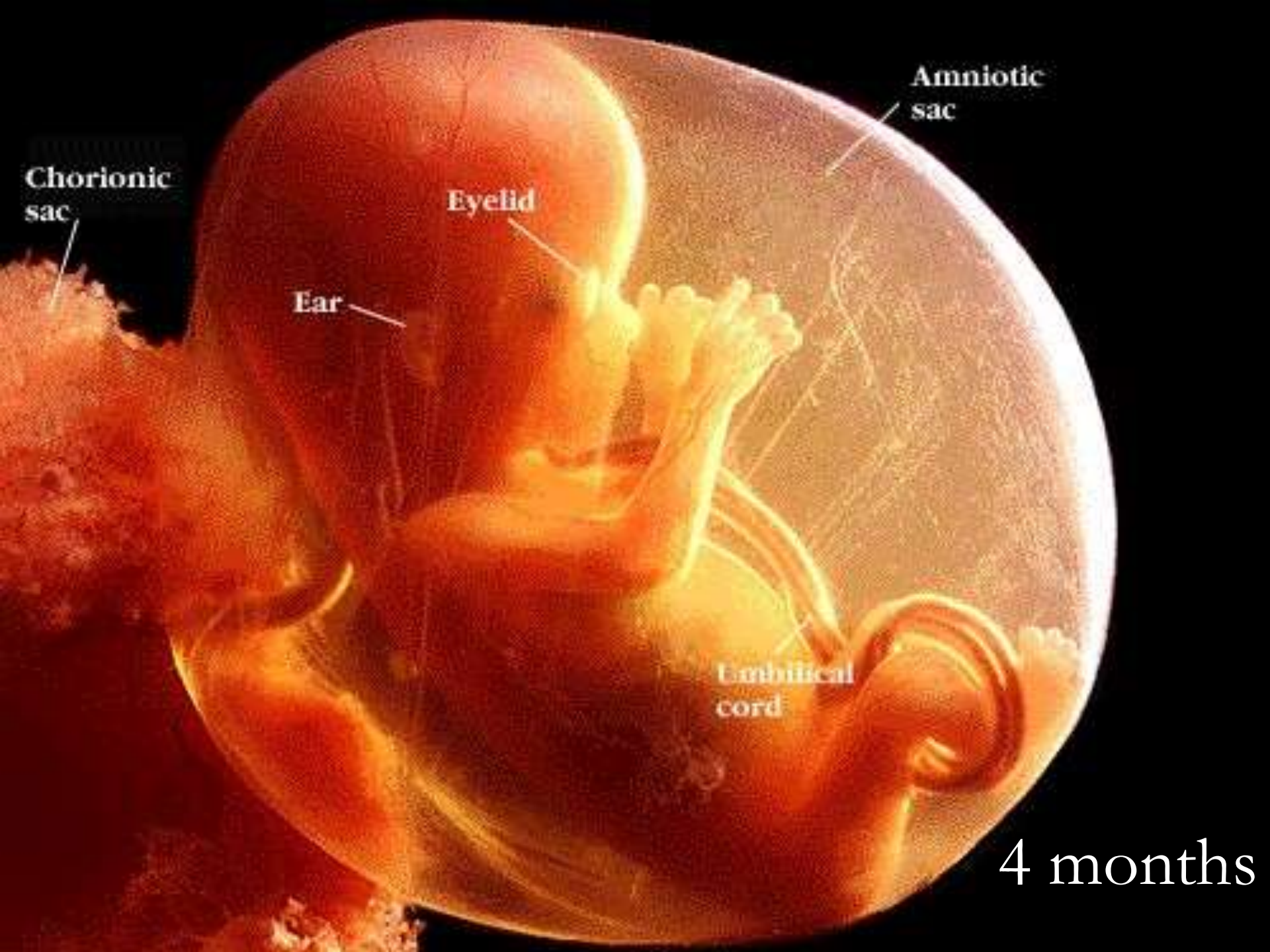
11 Weeks



12 Weeks

The Fetus—Month 4

- ❑ Fetus is 3 inches long and weights 5 oz.
- ❑ Your baby is covered with a layer of thick, downy hair called **lanugo**.
- ❑ His heartbeat can be heard clearly.
- ❑ This may be when you feel your baby's first kick.
- ❑ The baby can such thumb, swallow and hiccup.



Chorionic sac

Amniotic sac

Eyelid

Ear

Umbilical cord

4 months



15 Weeks



16 Weeks



18 Weeks

The Fetus—Month 5

- ❑ The Fetus is about 6 inches long and weighs 4-5 oz.
- ❑ A protective coating called **vernix** begins to form on baby's skin.
- ❑ Hair eyelashes and eyebrows appear
- ❑ Organs keep maturing
- ❑ Fetus is very active
- ❑ The eyes can open and blink

Smallest baby in the world born At just 22 weeks

Her little feet



- ❑ She was 10 OUNCES when born and 9.5 inches. That's just longer than the length of your hand. She weighed less than a can of soda!

The Fetus—Month 6

- The fetus is 8-10 inches long and weighs 4-5 oz.
- Your baby's lungs are filled with **amniotic fluid**, and he has started breathing motions.
- If you **talk** or **sing**, he can hear you.
- Fat is starting to deposit under the skin



Lanugo (downy hair)

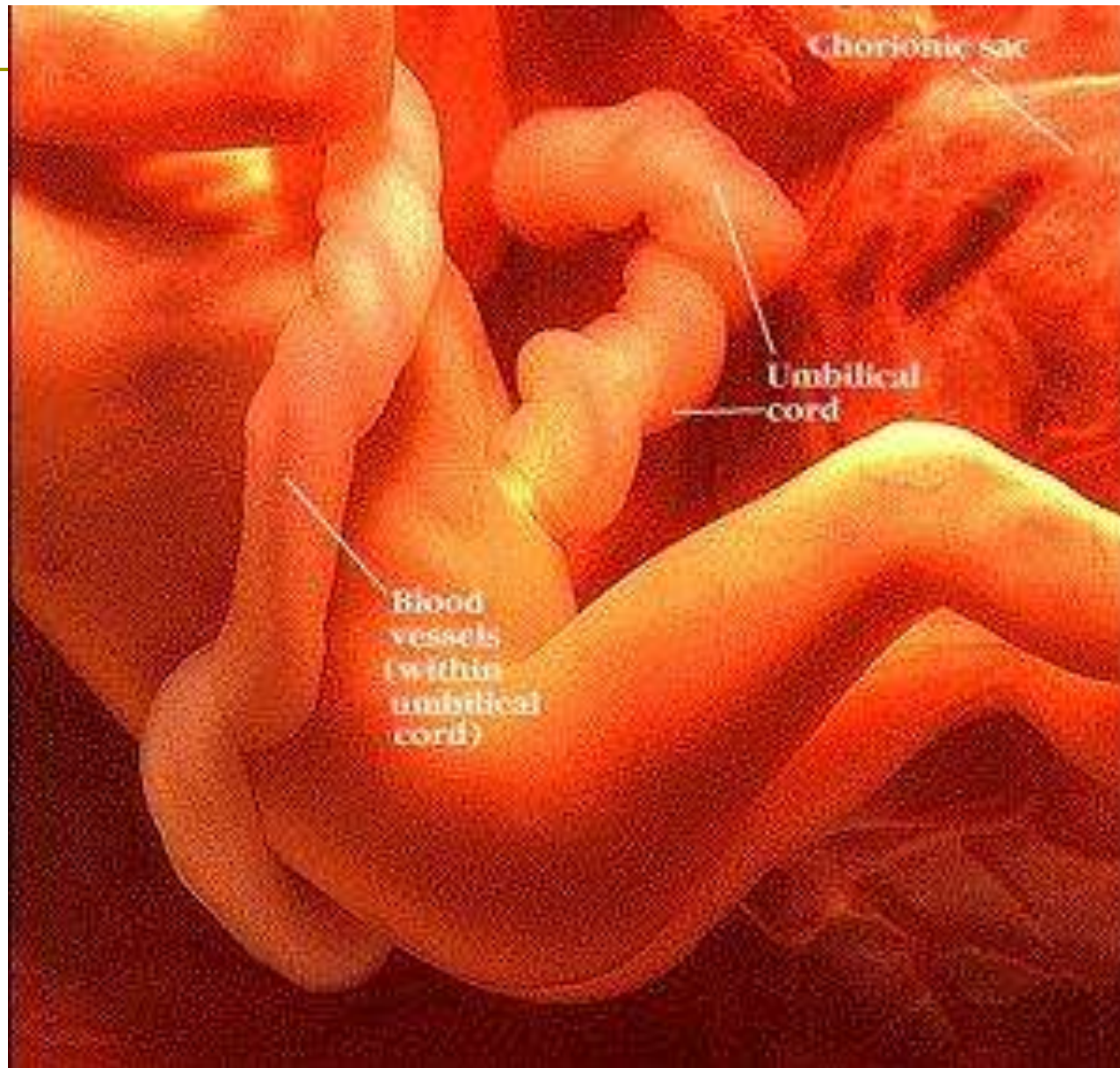
Vernix

6 Months

The Fetus—Month 7

- ❑ Fetus is 10-12 inches long and weighs about 1-2 pounds.
- ❑ Fetus is active and then rests.
- ❑ The baby now uses the four senses of vision, hearing, taste and touch

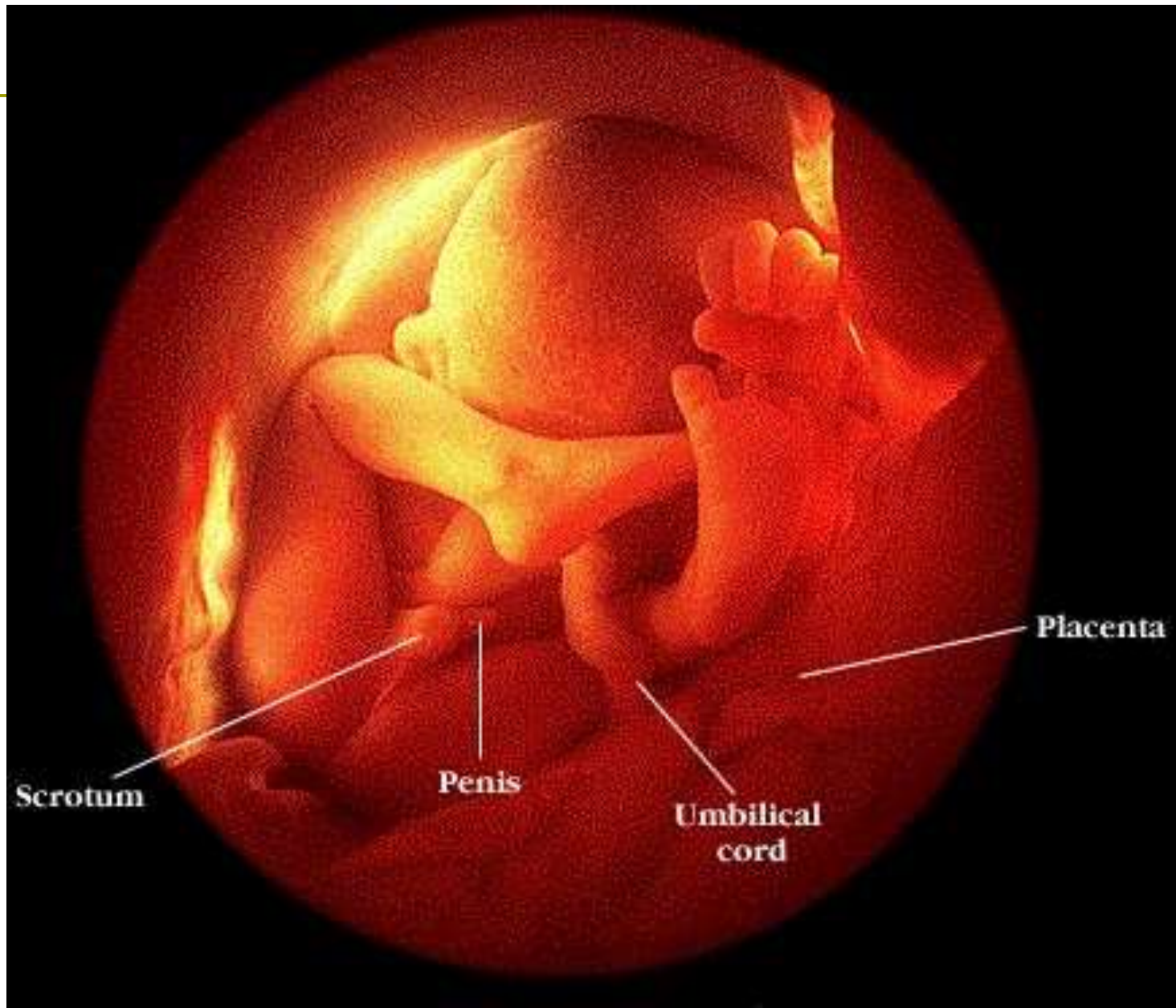
Seven Months



The Fetus—Month 8

- ❑ The fetus is 14-16 inches long and weighs 2-3 pounds
- ❑ Layers of fat are piling on.
- ❑ Fetus has probably turned head-down in preparation for birth.
- ❑ Fetus may react to noises with a jerking action

Eight Month



The Fetus—Month 9

- ❑ Fetus is about 17-18 inches long and weighs 5-6 pounds
- ❑ Skin is smooth because of the fat
- ❑ Baby's movement slows down due to lack of room
- ❑ "Lightening" occurs when the baby drops in the pelvis
- ❑ Disease fighting antibodies are taken from the mother's blood



