

INJURY OCCURS

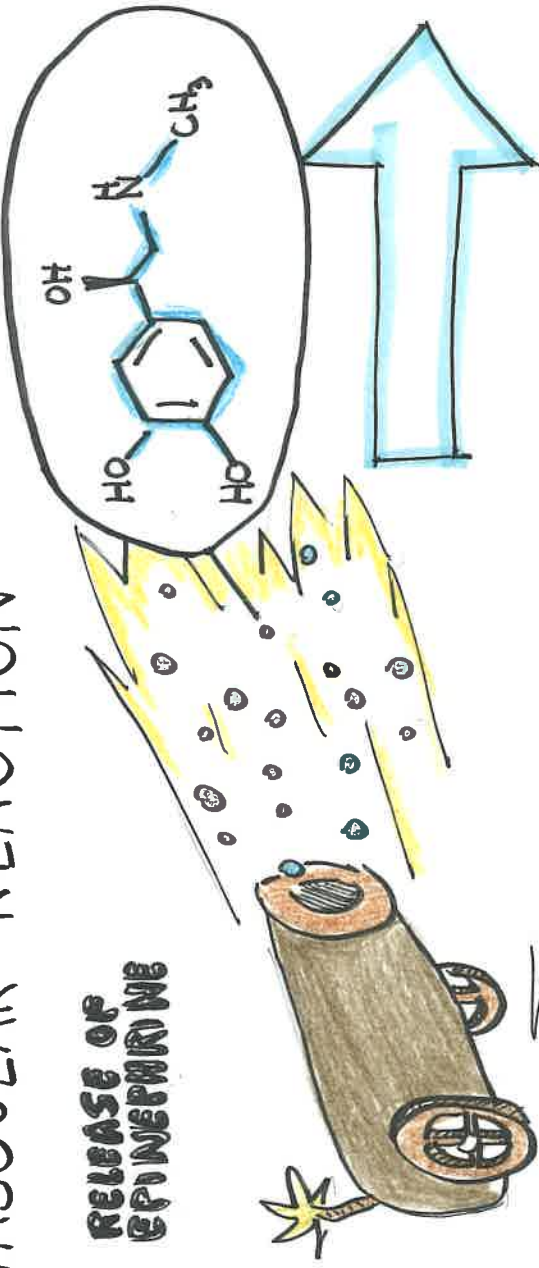
FRN



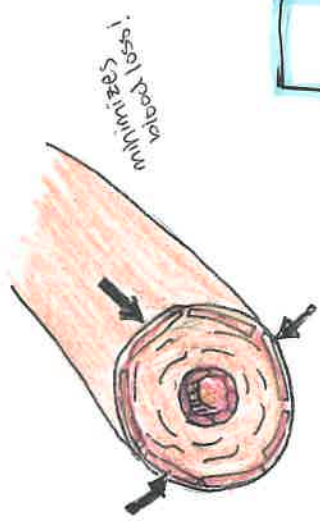
VASCULAR REACTION

2

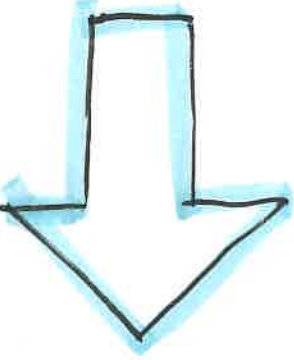
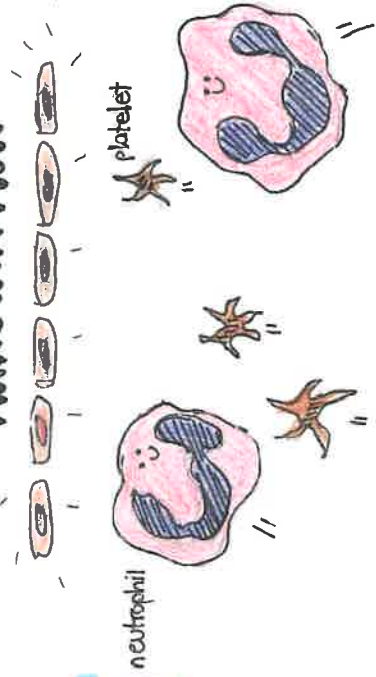
RELEASE OF EPINEPHRINE



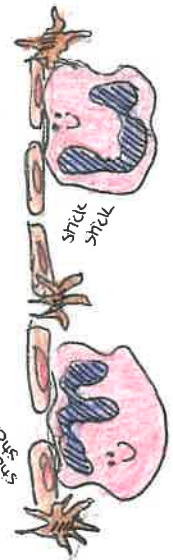
VASOCONSTRICTION



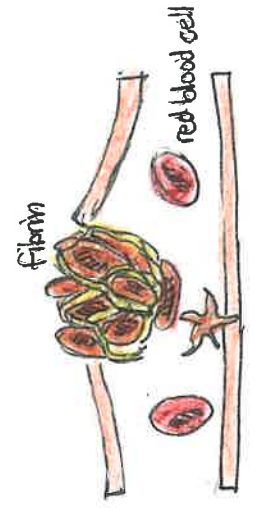
MARGINATION



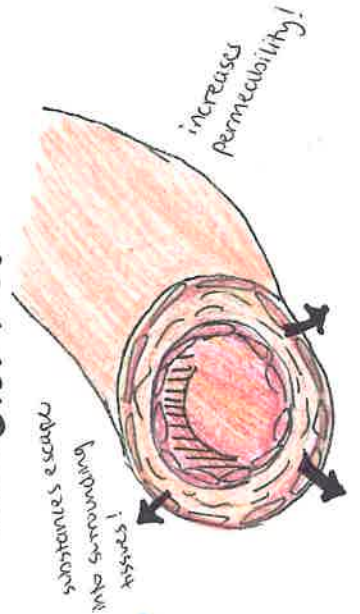
PAVEMENTING

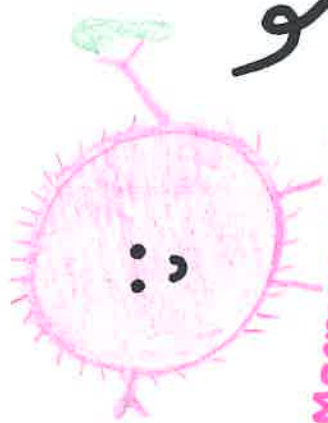


COAGULATION



VASODILATION





Macrophages remove debris

neutrophils released to fight bacteria

(Sometimes healthy tissue)



Platelets from plugs that plug blood vessels



platelet plug

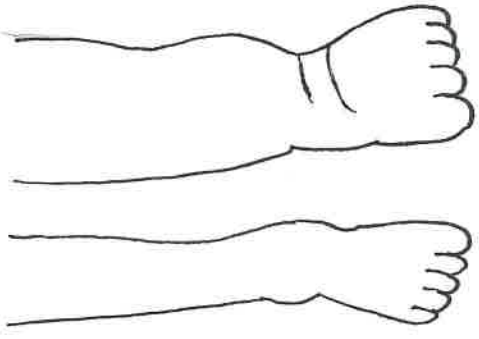
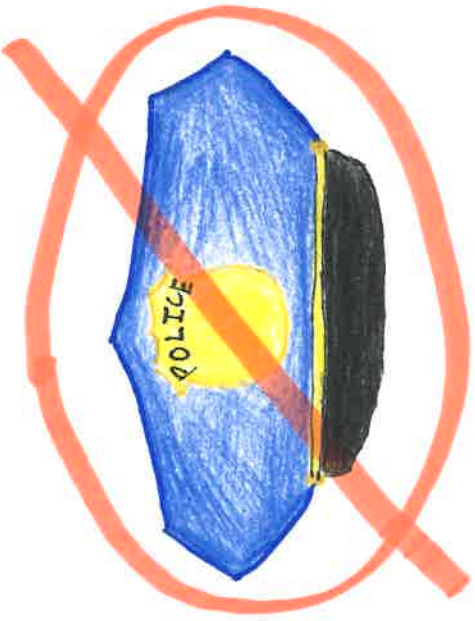
blood vessel



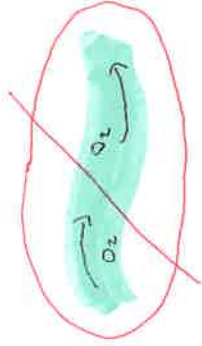
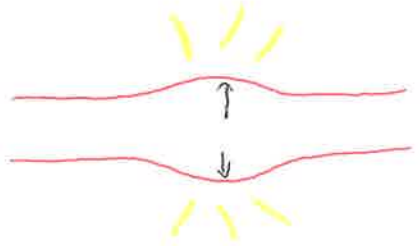
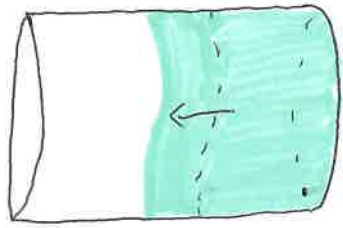
Coagulation occurs

Secondary Injury

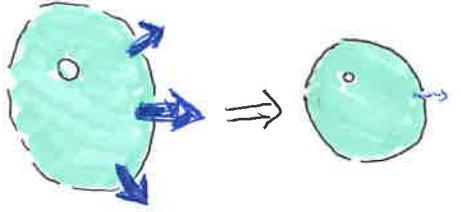
H



Edema



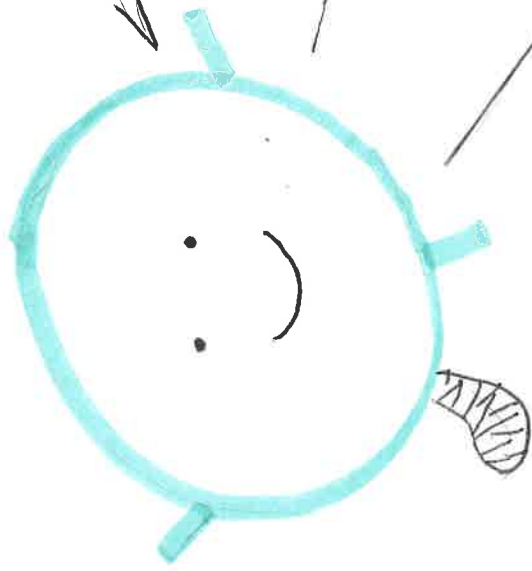
NO flow
NO oxygen



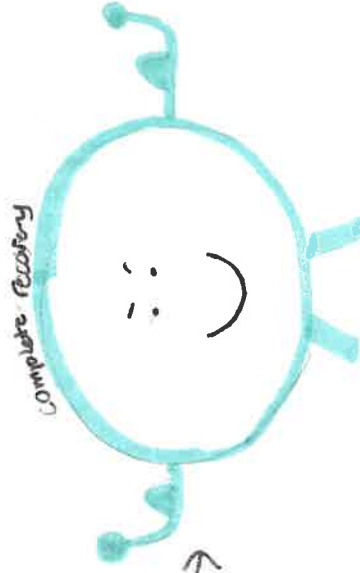
Subacute Inflammation Phase

14 - 31 days

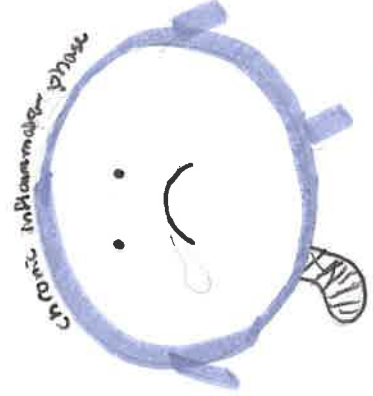
← decreased signs + symptoms!



can go to...



or...



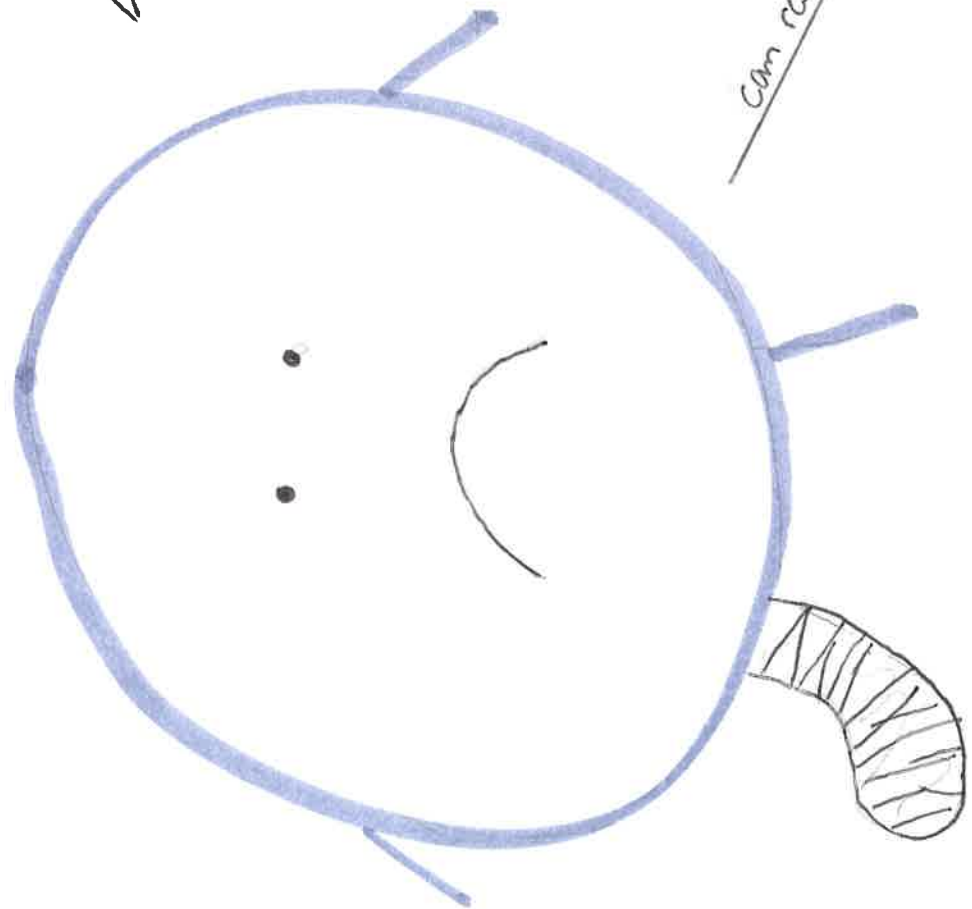
Chronic Inflammation Phase

> 31 days

loss of function

[sometimes doesn't show other signs of inflammation]

body still reacting to injury



Can result in...



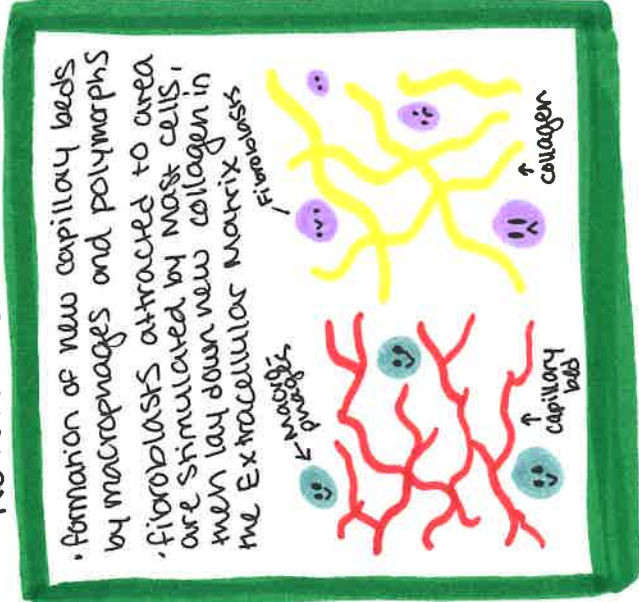
Proliferation Phase

7

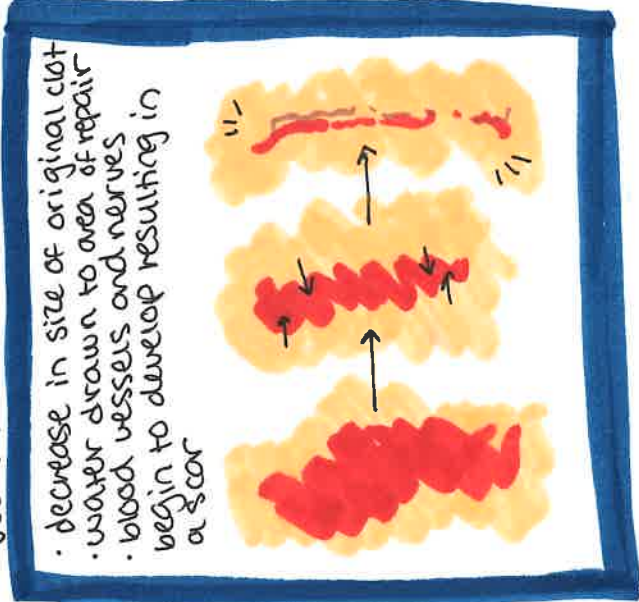
↳ removal of debris temporary repair of tissue formed during inflammation phase
 ↳ followed by development of new replacement tissues

Basics and processes

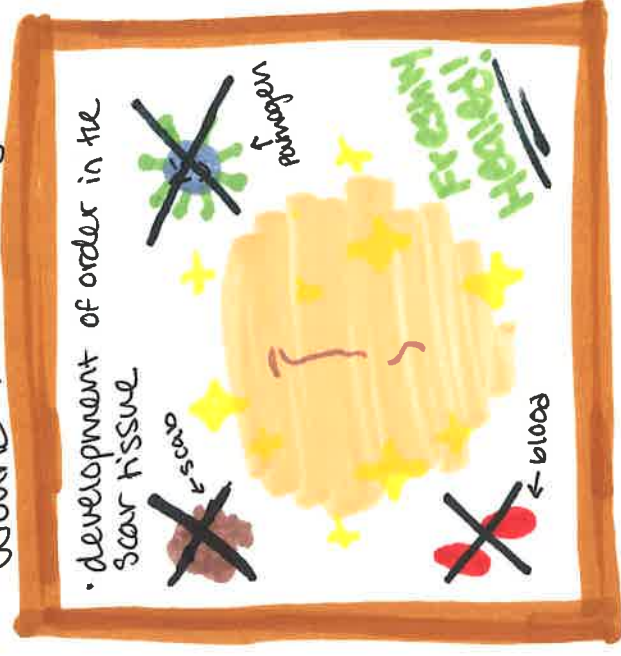
Revascularization



Wound Contraction



Wound Remodeling



Also Occurring → Proliferation of Granulation Tissue

1. Fibroblast Formation

Fibrocytes → Fibroblasts

3. Tissue Remodeling

processes with regeneration & resolution

2. Synthesis of collagen

Fibroblasts contribute

4. Tissue alignment

Forces placed on tissue can encourage direction
 ex. massage & exercise

8 Proliferation: Tissue Injury outcomes

> Resolution

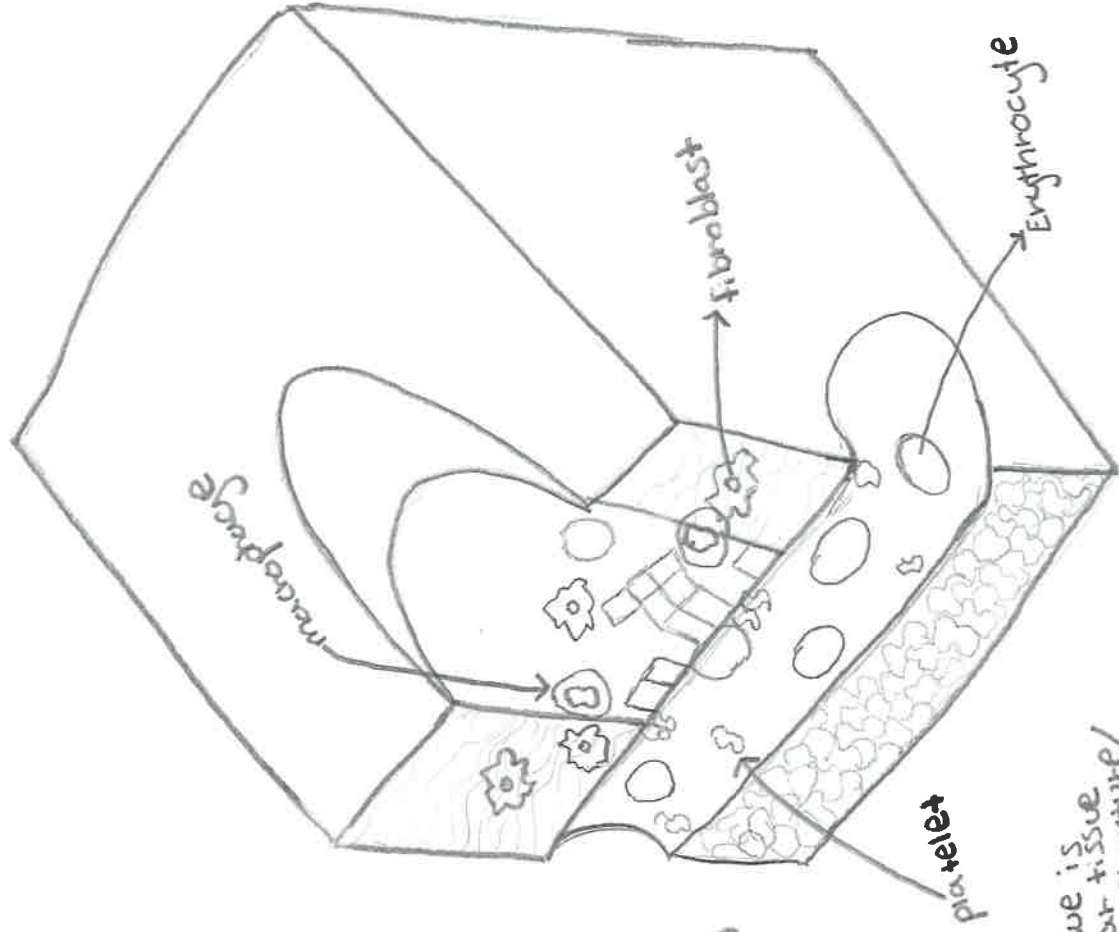
Tissue is left with it is original structure and function intact

> Regeneration

New cells of the same type as the injured cells are formed and can perform same or all of the same functions as the original tissues; not all tissues can regenerate

> Repair

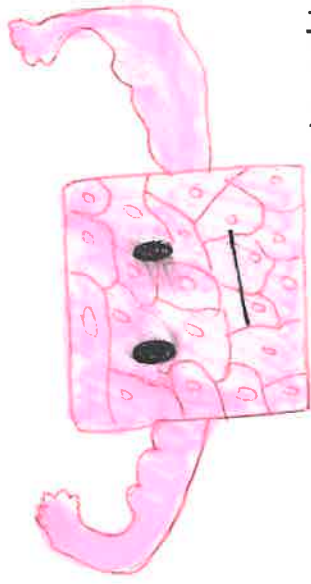
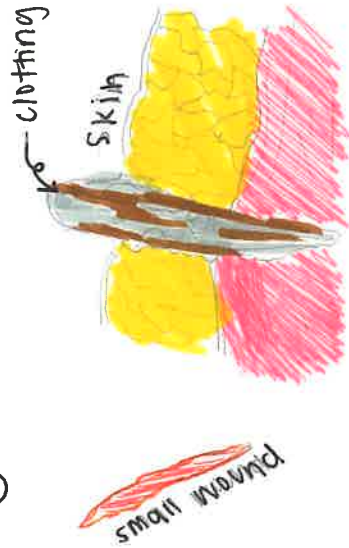
The original tissue is replaced with scar tissue and the original structure/function is lost



maturation phase

↳ remodeling

① size



increases replaced / repaired tissue strength

CAN LAST UP TO A YEAR

② severity



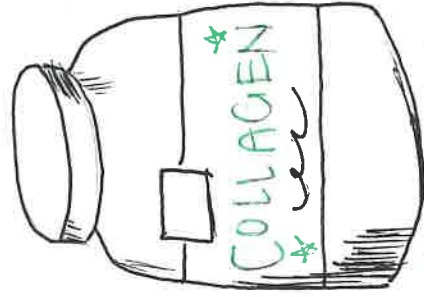
mild



moderate



severe



- ↳ reduces scarring
- ↳ creates an environment for tissue healing