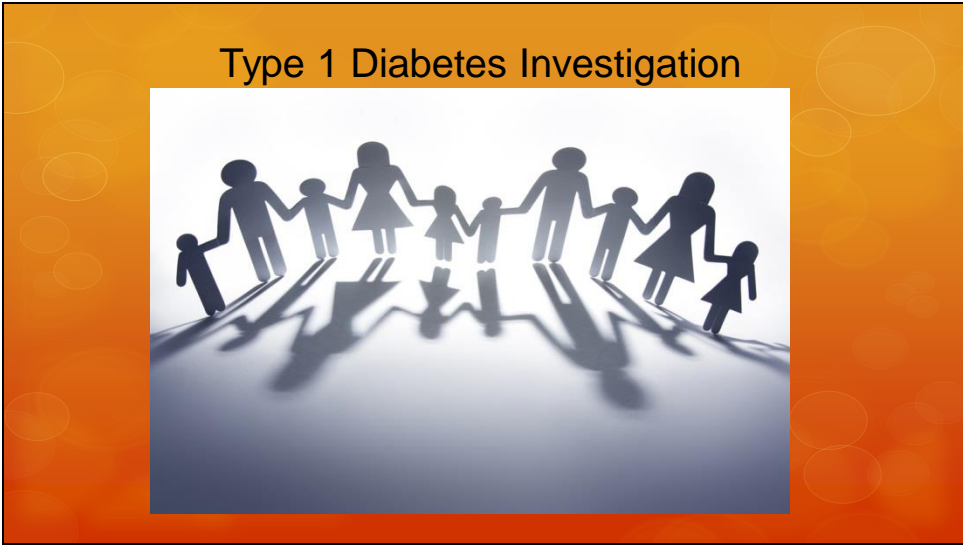


# Presentation Notes

## Type 1 Diabetes Investigation

Slide 1



# Presentation Notes

## Type 1 Diabetes Investigation

Slide 2



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# Presentation Notes

## Type 1 Diabetes Investigation

Slide 3

Do you know anyone with Diabetes?



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Allow students to share.

Do you know if they have Type 1 or Type 2 Diabetes?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 4

What do you already know?



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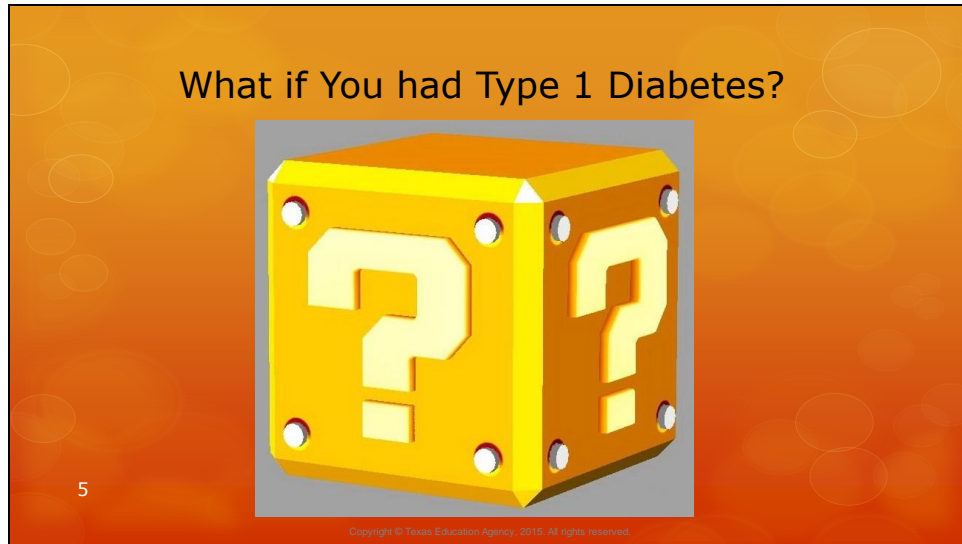
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In this lesson, we are going to focus on Type 1 Diabetes.

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 5



Allow students to share.

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 6

Type 1 Diabetes



What do we need to know?

6

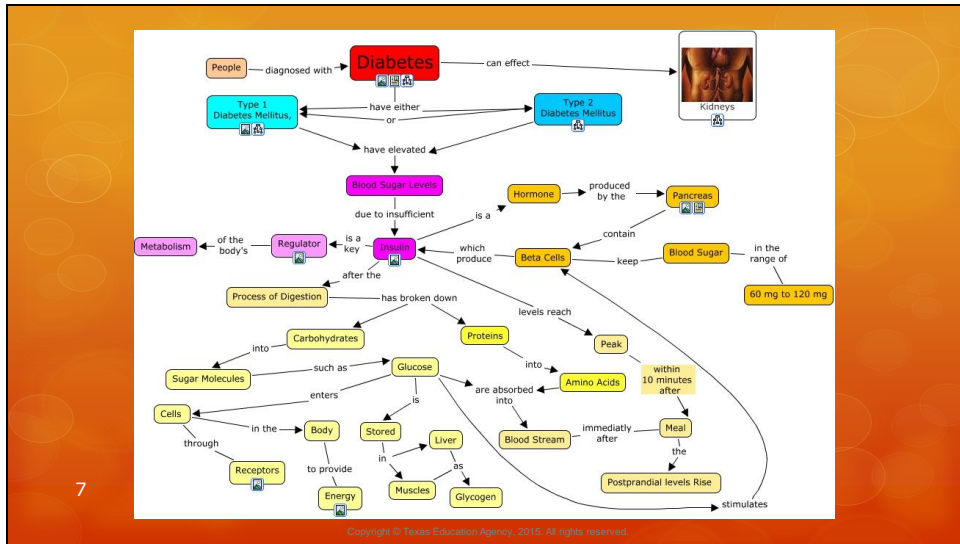
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As a parent or educator, what would you need/want to know about the disease?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 7



What can you tell from this graphic organizer?





# Presentation Notes

## Type 1 Diabetes Investigation

Slide 9



Does anyone know what is happening in this slide?

Does anyone know the correct name for this tool? Its purpose?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 10



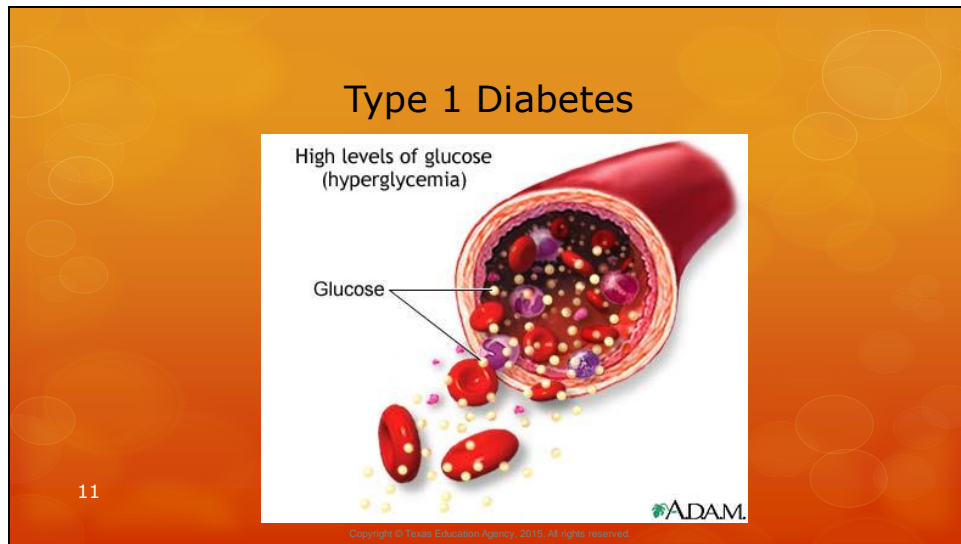
What does this image show?

What are they used for?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 11



Think back to your science class, does anyone know another name for glucose?

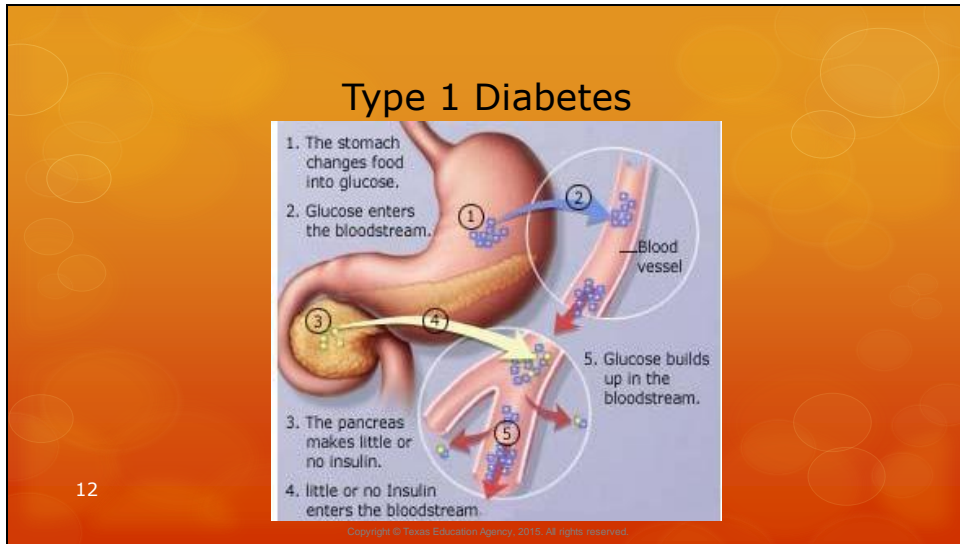
What is the difference between the prefixes hyper and hypo?

What do you think Hyperglycemia is referring to? Hypoglycemia?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 12



What are the functions of the stomach?

What about the pancreas? Blood vessels? Bloodstream?

What is insulin?

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 13

**Diabetes**

Complications of Chronic Hyperglycemia

- Retinopathy**
  - Macular edema
  - Capillary nonperfusion
  - Angiogenesis
  - Hemorrhage
  - Glaucoma
- Stroke**
- Heart disease**
  - Atherosclerosis
  - Endothelial dysfunction
  - Hypertension
  - Dyslipidemia
  - Procoagulant state
  - Antifibrinolytic state
  - Vascular inflammation
- Nephropathy**
  - Damaged glomeruli
  - Hyperfiltration
  - Renal damage
- Autonomic neuropathy**
  - Nerve damage
  - Gastrointestinal dysfunction
  - Genitourinary dysfunction
- Peripheral neuropathy**
  - Nerve damage
  - Ulceration
  - Necrosis

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American Diabetes Association Position Statements, Diabetes Care 2004; 27

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What's another word for complication?



# Presentation Notes

## Type 1 Diabetes Investigation

Slide 15

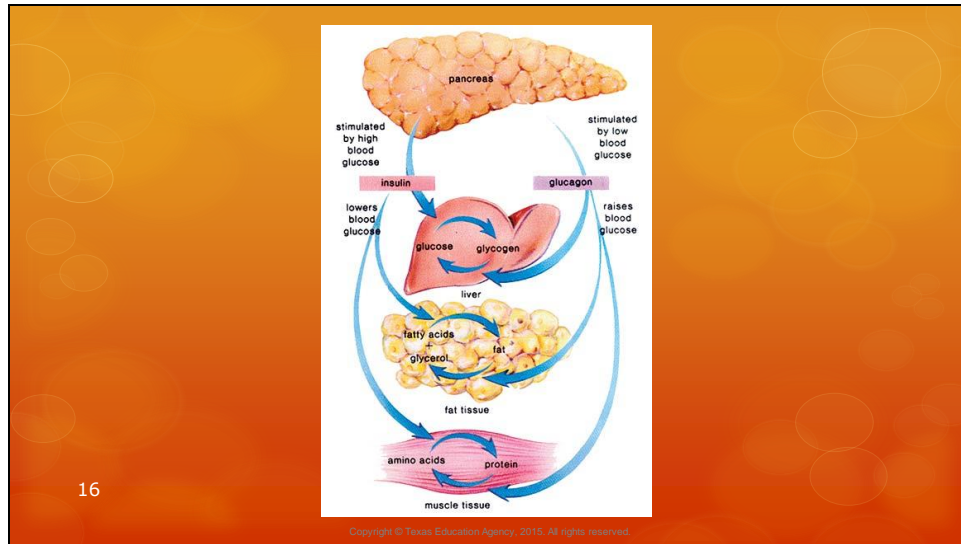


Research for Type 1 Diabetes would follow the scientific method.

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 16



What organs do you think are affected by Type 1 Diabetes?



# Presentation Notes

## Type 1 Diabetes Investigation

Slide 17



Introduce Type 1 Project Options Investigation activity.

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 18



# Presentation Notes

## Type 1 Diabetes Investigation

Slide 19

The following video can be viewed at the end of the guided practice section of this lesson.

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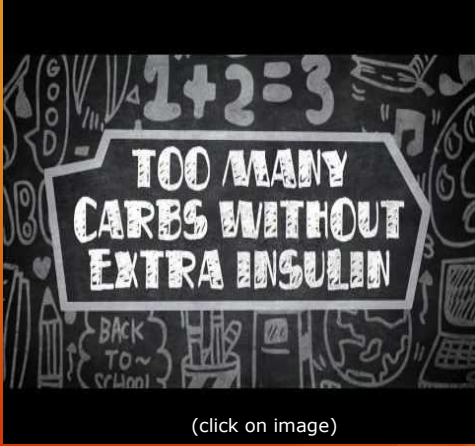
# Presentation Notes

## Type 1 Diabetes Investigation

Slide 20

JDRF Type 1 Diabetes 101

An educational video about type 1 diabetes signs, symptoms, and treatment, featuring kids and teens with the disease



(click on image)

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Click on image to view video:

### JDRF Type 1 Diabetes 101

An educational video about type 1 diabetes signs, symptoms, and treatment, featuring kids and teens with the disease.

<http://youtu.be/EOM4oxBtnXo>

# Presentation Notes

## Type 1 Diabetes Investigation

Slide 21

### References and Resources

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- Microsoft Office Clip Art: Used with permission from Microsoft™. (Slides 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
- Shutterstock™ images. Photos obtained with subscription. (Slide 18)

Websites:

- American Diabetes Association  
Articles and resources on diabetes  
[http://www.diabetes.org/diabetes-basics/type-1/?loc=util-header\\_type1](http://www.diabetes.org/diabetes-basics/type-1/?loc=util-header_type1)
- Juvenile Diabetes Research Foundation (JDRF) Improving Lives Curing Type 1 Diabetes  
The leading global organization funding type 1 diabetes (T1D) research  
<http://jdrf.org/>

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