

The Von Thunen Model

Essential Question

***Does location matter for agricultural products?
How does the Von Thunen Model explain
agricultural patterns throughout the world?***

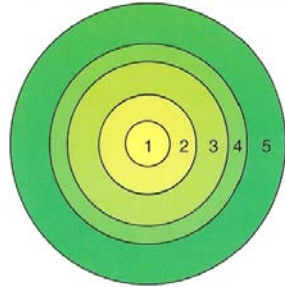
Models are created in geography to help us understand and wrap our head around this complex world



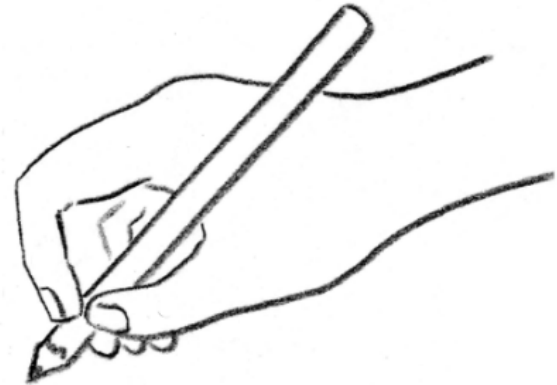
Today our model – the planning of the city and reasoning of the layout

Draw the Von Thunen Model

- Here is your challenge...
 - Draw the following model in your notes. →
 - Using the following types of resources, show where you think that each would be located in relation to each other.
- What would be at the center (1), what would be next (2), all the way to what would be the Farthest (5).



- **Forest**
- **Ranching**
- **Fruits/Vegetables**
- **Grains**
- **Dairy**
- **City/Market**



Johann Von Thünen



The Von Thünen Model

Created by a farmer in northern Germany named J.H. Von Thünen in 1826 to **explain the importance of proximity to market in the choice of crops on commercial farms.**

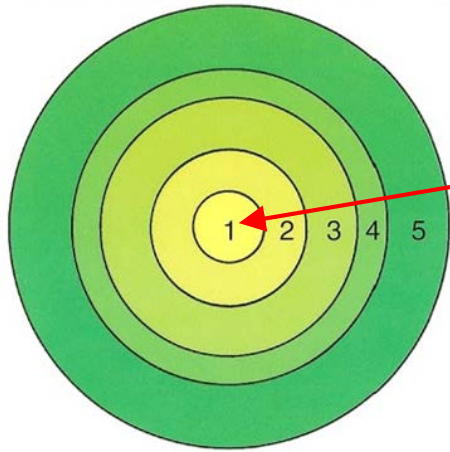
The Value of Land

Bid-Land Theory: Proximity = Value

“get bang for your buck!” – true for urban and rural agriculture

Von Thunen Model = Concentric Rings

Layer 1: Urban Center/Market – **WHY?**



- At the heart of the model is the city, where the people live and work.
- Primarily where agricultural products are brought to be sold

Concentric Rings

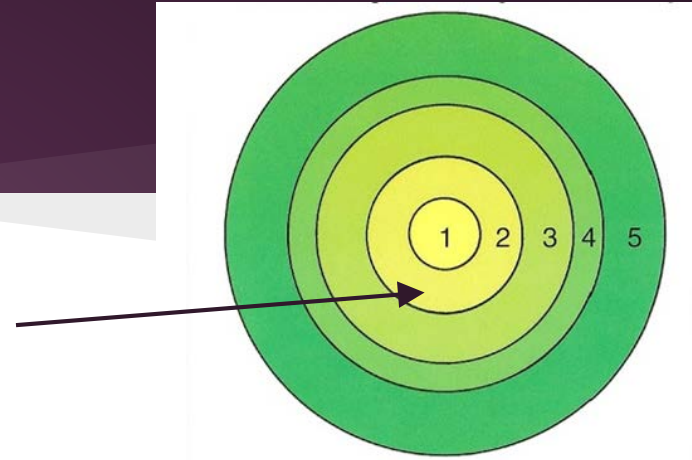
There are 4 rings around the city

**Dairy & intensive farming
are closest. (garden)**

Why?

Because fruit, milk, and other dairy
product must get to market quickly.

Remember that there were not refrigerated Oxcarts!



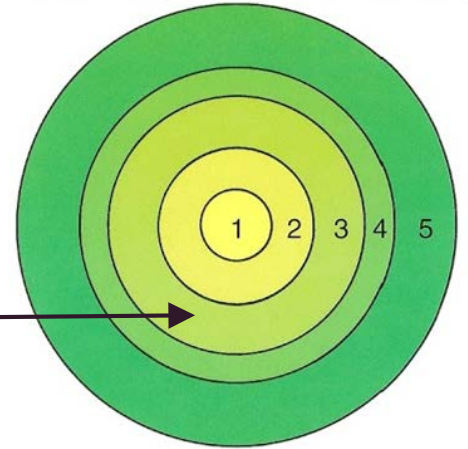
Concentric Rings

**Timber & Firewood for Fuel
and Building Materials are
next**

Why?

Because it is heavy and difficult to
transport

*Remember this is before
central heating and electricity*

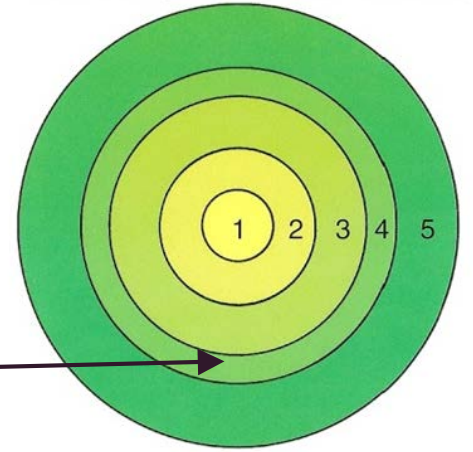


Concentric Rings

**Farming/Field Crops
(like for making bread)**

Why?

Because grains last longer than dairy, &
are lighter than fuel, so transportation
costs are less.

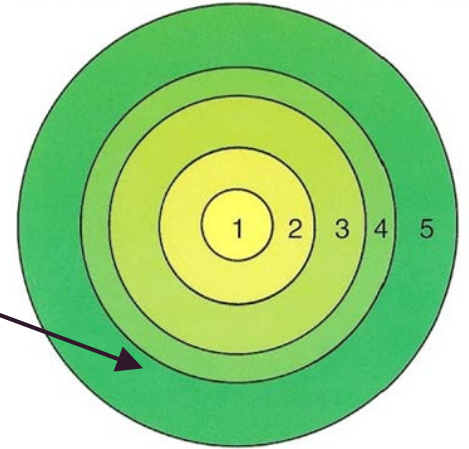


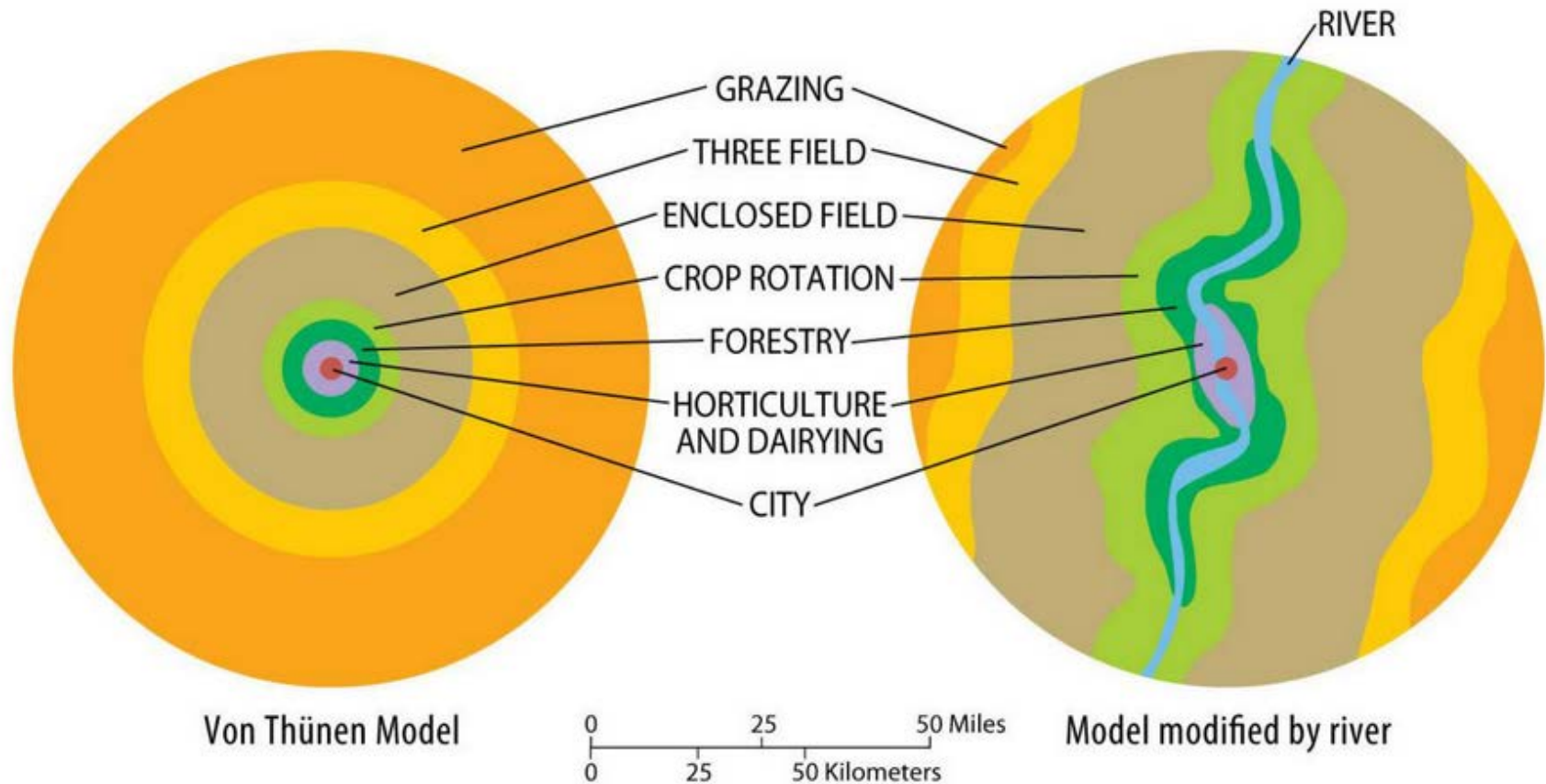
Concentric Rings

Ranching

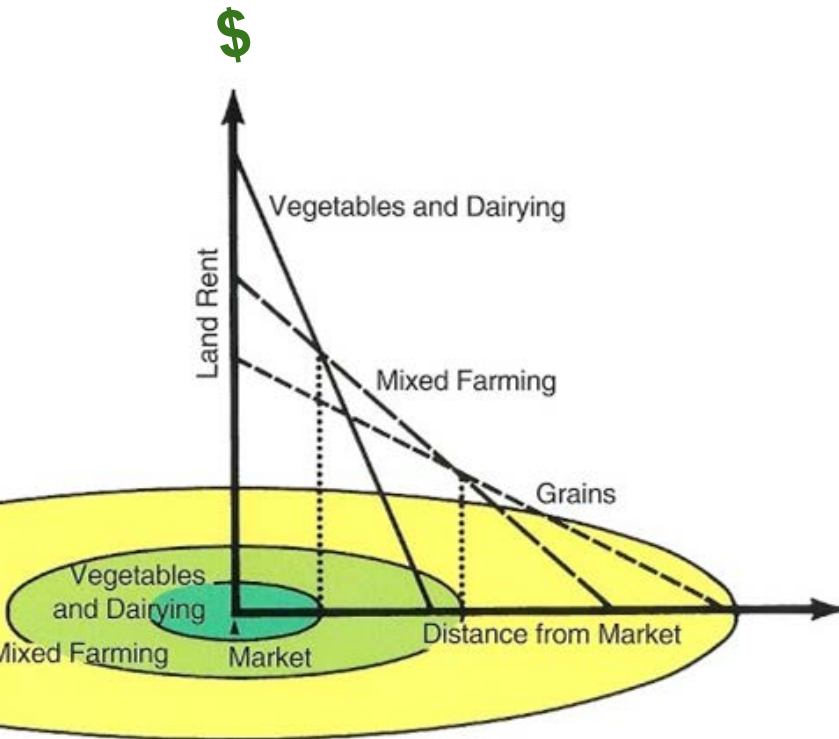
Why?

Because animals can walk themselves to be, um... butchered.





A lot has changed since the Industrial Revolution.



*We have highways & railways,
so why study this model?*

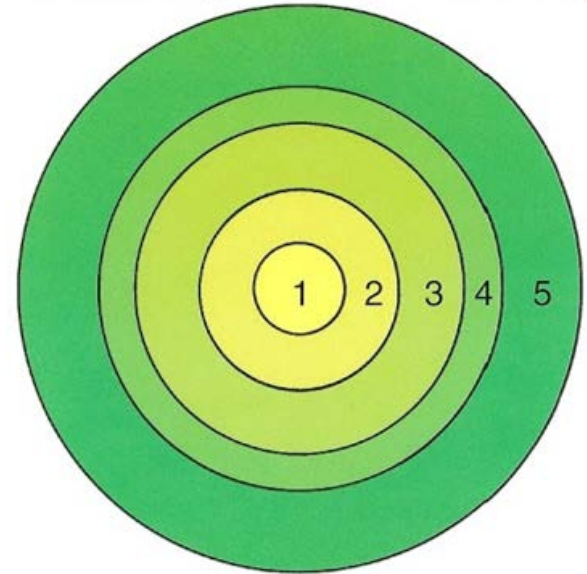
This model helps us understand
the balance of
land cost & transportation cost.

**As one gets closer to the city,
the price of land increases.**

We are no longer in 1826 Germany, but...

We can still apply this model
with a few modifications.
The forestry ring is gone

1. City still in the center
2. Dairy & Market Gardening (fruits & veggies)
3. Cash Crops (Corn, soybeans: stuff to sell)
4. Mixed Crop & Livestock (growing crops to feed the livestock)
5. Extensive Livestock and Extensive Grain (wheat)



Questions: Discuss in your groups!

- 1. What problems do you see with the Von Thünen Model?**
- 2. In what ways does the model help explain the types of agricultural locations in Oregon?**
- 3. Based on what you know about agriculture in the United States as a whole, could Von Thünen's model be used to explain our agricultural patterns? Why or why not?**
- 4. If Von Thünen's model were applied to the United States, what would be considered the 'market area'? Why?**

Von Thünen in the USA

Both of these maps use NY as the only market,
but the map on the right also considers the different climates



Summary Time!

Using your notes and what you have learned today – answer the following question for your summary.

How does the Von Thunen Model explain agricultural patterns throughout the world?