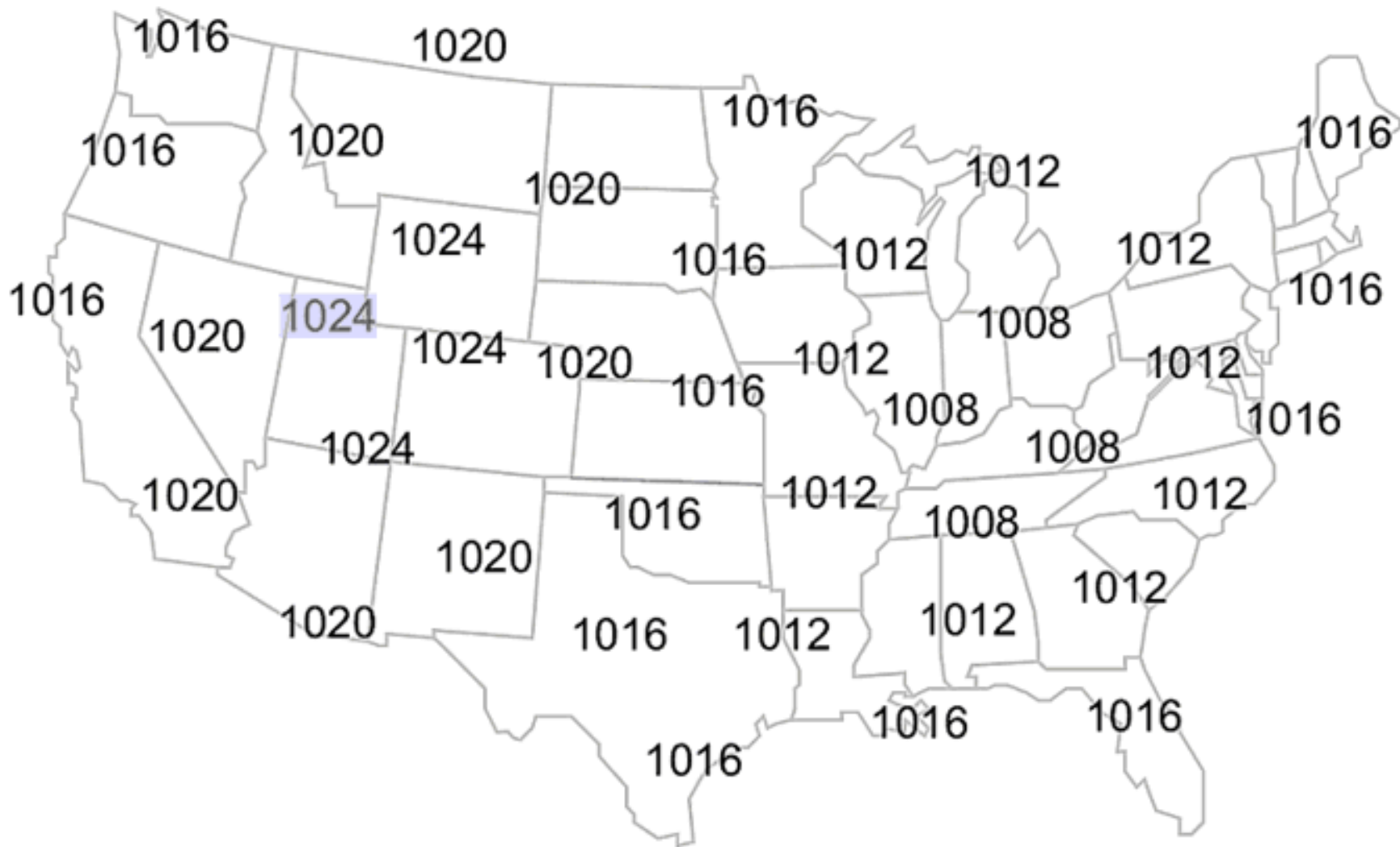


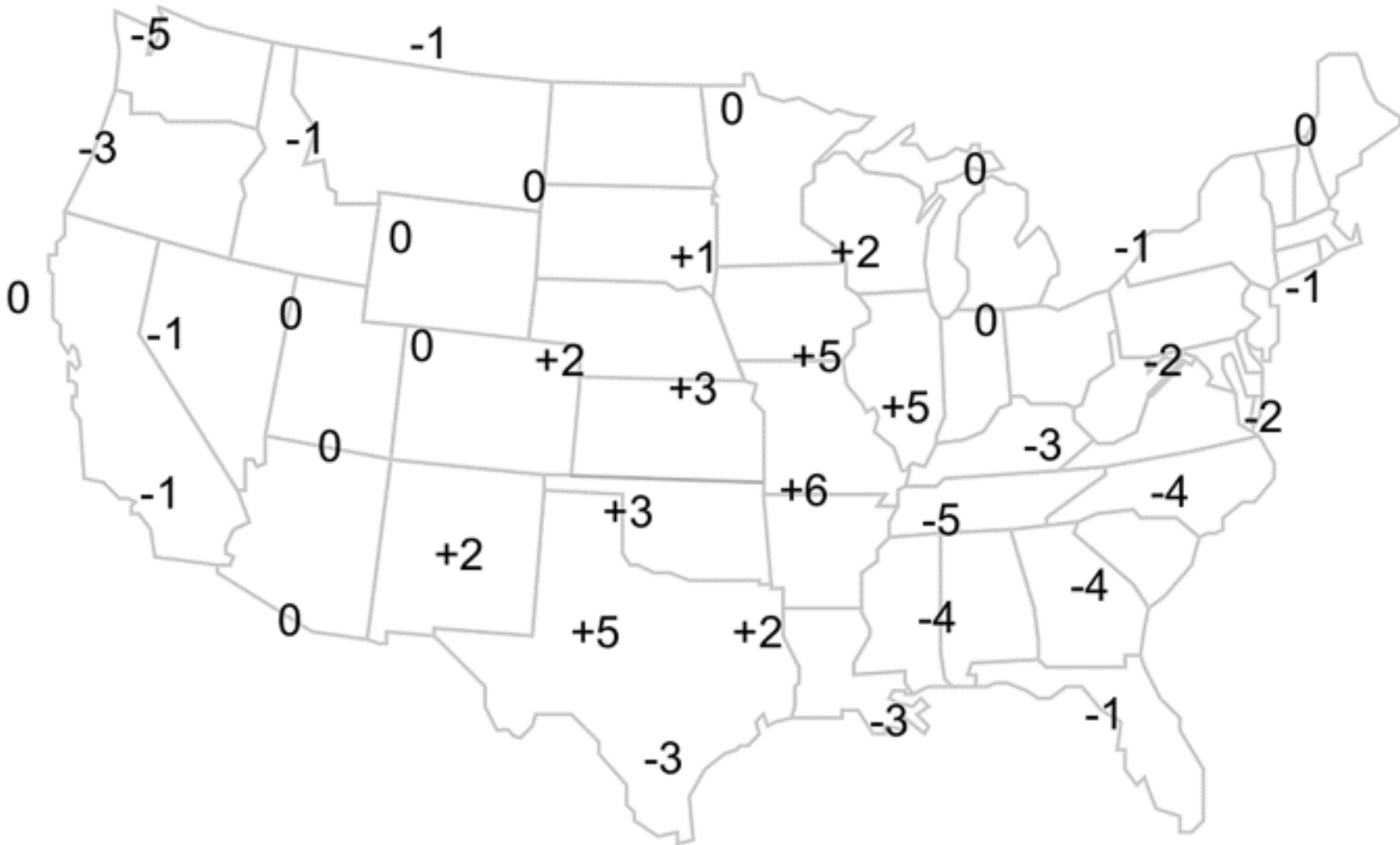
1) Draw some ISOBARS on this one! An isobar is a line connecting the *same pressures*.



Can you find a **HIGH**? Can you find a **LOW**?

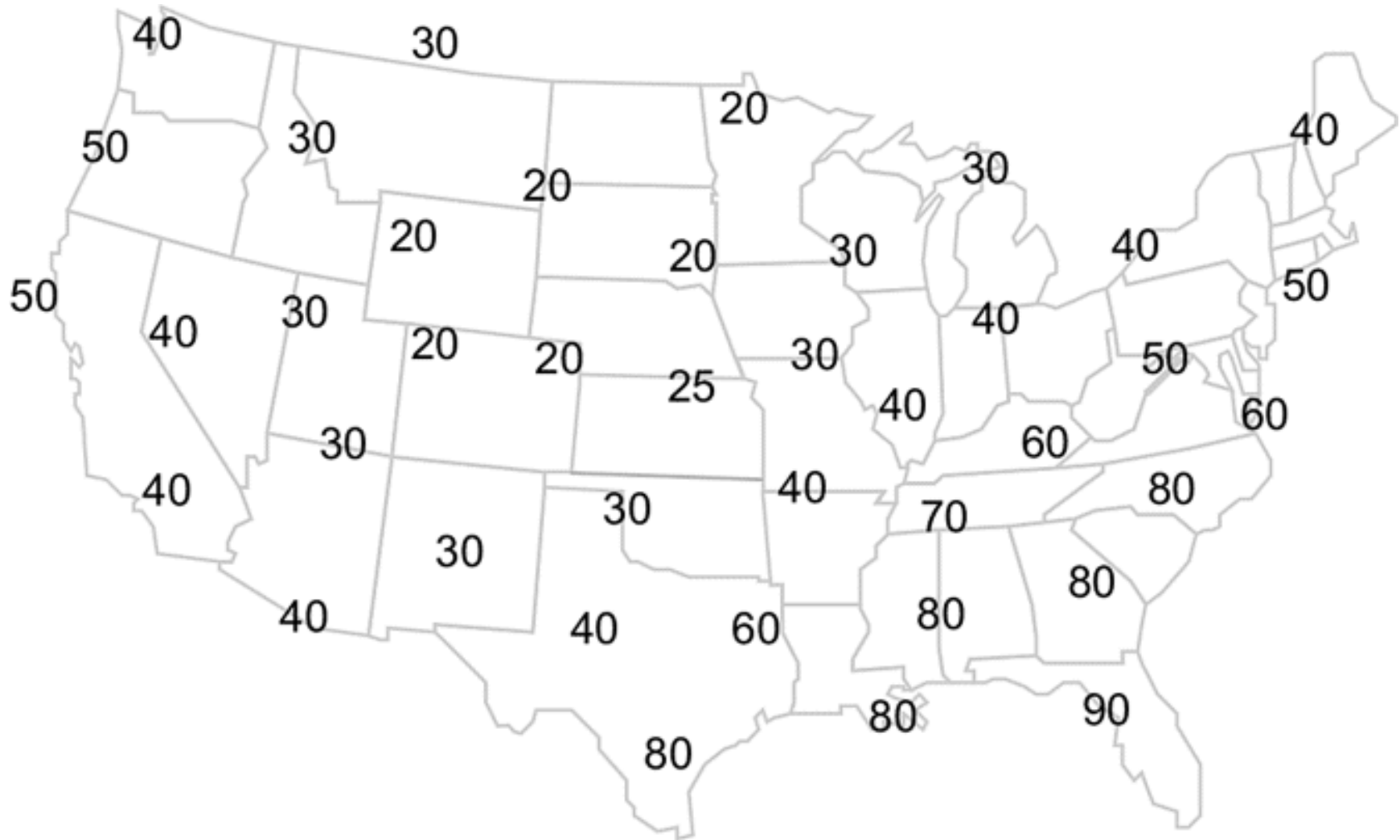
2) Areas of **HIGH** pressure tend to have clear skies, and areas of **LOW** pressure tend to have rain. Shade in where you might expect rain:

3) Now let's look for FRONTS. Draw lines connecting similar *changes* in pressure. These are called **isallobars**.



A COLD FRONT often happens where the pressure change **increases** most. Cold fronts tend to move faster so change pressure more rapidly. Can you find a COLD front and a WARM front?

4) How does pressure relate to temperature? Try drawing some **isotherms** (same temperature):



Compare this to your first drawing of **isobars**. Can you find a relationship?

Additional questions:

- How do the cold and warm fronts relate to what you drew for the rain?
- which way do you expect the wind to blow? Discuss how winds go CW around a high pressure system and CCW around a low pressure system. We usually are used to looking at the CCW motion of clouds around lows because that's where the clouds tend to form, but the CW directions are also important
- which way does wind blow in general across the US? West → East but many different pieces (the CW and CCW change into W->E flow due to Coriolis effect. Probably for older kids only).
- Where do you expect a strong storm to form? Much bigger storms at cold fronts than at warm fronts, which overtake more gently and slowly, riding up over the cold front ahead of it (these give you the “fish scales and mare’s tails” which lead to showers a few days later).
- Of course, weather has a lot more complicated pieces than this!

Here is the actual weather map from this system. How did you do?

