

Wk 23 Circular Motion

1. Angular vs Regular Velocity



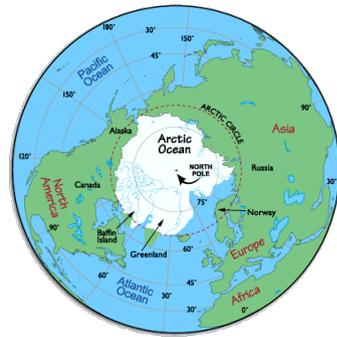
1. On the Swings, some riders are closer to the center of the circle than others.
- a) Who has the greater **angular** velocity (RPMs)?
- Inner riders
 - Outer riders
 - It's the same.
- b) Who has the greater **regular** velocity?
- Inner riders
 - Outer riders
 - It's the same.



2. In the Shot Put (top) and the Hammer Throw (bottom), the projectiles have almost exactly the same mass.
- Which sport has the farther throws?
- Shotput
 - Hammer Throw
 - It's the same.
- WHY??



3. Why does the outer skater have a head start?



4. As the Earth spins...
- a) Where is the greater **angular** velocity?
- At the Equator
 - At the Poles
 - It's the same
- b) Where is the greater **regular** velocity?
- At the Equator
 - At the Poles
 - It's the same
- b) Where is there ZERO **regular** velocity?
- At the Equator
 - At the Poles
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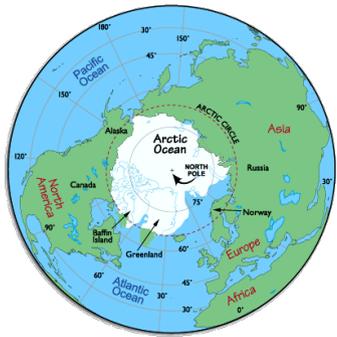
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