**Why do we need routers?**

* To connect different networks.

**How do you configure interface descriptions and message of the day?**

* description Link to R2
* banner modt

**How do you configure interfaces with ip-addresses?**

* interface [port]
* ip address x.x.x.x y.y.y.y (x -> ip address y-> subnetmask)

**On which side of the serial connection between the routers one must configure the clock-rate?**

* On the DCE side

**Explain the different switching methods of a router.**

* Process switching
* fast switching
* Cisco Express Forwarding

**What is a metric?**

* A measure called metric is used to decide which route will be placed in the routing table, if a router learns multiple different paths to the same network

**What is the Administrative Distance?**

* Routers use administrative distance to select the best path if there is more than one route to the same destination

**Explain directly connected routes!**

* They are configured on a routers interface, they get an administrative distance of 0.

**Read chapter 2 "Static Routing"**

**What are the pros of static routes?**

* Static routes have better security.
* Due to a fixed routing path, static routes use less bandwith and there are no CPU cycles needed to calculate a route.
* The path, of a static route is known

**in which networks static routes should be configured?**

* In smaller networks wich are not nupposed to grow significant.

**For which networks do we need to write static routes on a router?**

* For the networks where we can not use static routes or more that two routers

**Learn the usage of the ip route command! use ONLY next-hop-ip routes!**

**Which command shows the routing table?**

* show ip route

**What is a static default route?**

* This is a method wkhere all routers send all packets to a single router

**Write down the static default route for IPV4 and IPv6!**

* IPv6:  ::/0
* IPv4: 0.0.0.0 0.0.0.0

**Watch the youtube videos linked from your moodle course!**