Exercise B1. Let f be an expanding map on the circle. Prove that periodic points are dense.

Exercise B2. Let f be a factor of g. Prove that if g is topologically mixing, then f is topologically mixing.

Exercise B3. Let f be an expanding map on the circle of degree 3. Following what we did today, define a semiconjugacy of f with the shift of 3 symbols (just state it). Can you describe the points of non-injectivity of h? how many preimages does have each point at most?