

Microbiology lab report assignment



**ASSIGN
BUSTER**

We are interested in the renewal of exploration following rearrangement of objects within the open field apparatus used as the initial novel surroundings for the rats. The results were expected to be similar to those found in similar studies done by Pocket et. Al (1986) who investigated exploratory behavior as an index of special knowledge in hamsters. It was expected that through exploration, the contact time with objects in the open field and the number of contacts would increase when new objects were introduced. The importance of building a spatial map was clear when they observed greater exploration in animals that had displace objects.

Thus we expected that if the rats became habituated to their environment and the spatial arrangement of the objects within it would change, then the rats would exhibit an increased amount of exploratory behavior during that trial. Methods: Subjects The subjects were adult male Sprague Dawdle rats. Six sections of four rats per group were maintained on a 12/12 light/dark cycle and housed individually with unlimited access to food and water ad libitum. Materials The Subjects were tested in an open field container. It consisted off 4' x 4' Plexiglas field, surrounded by 16" tall Plexiglas walls.

The field had no lid. The floor of the field was divided into 36, 8" x 8" squares, using masking tape. There were three objects inside the field, including were a jar of rocks and a soda can. Procedure Week 1: At the start of the session, subjects were carried in their personal cage to the experimental field. The room lights were dim. Subjects were placed in the middle of the open field maze with no objects in it. The sessions were timed and exactly five minutes long.