Here's an example of a game using the Alkanes and Haloalkanes die assignments. The game lasted 11 turns before we ran out of time.
(1) Rolled a 4 - Added an Isopropyl Group
(2) Rolled a 5 - Added a Halogen

2,3-dimethylpentane


2-chloro-3,4-dimethylpentane
(3) Rolled a 2 - Added an Ethyl Group


4-chloro-2,3-dimethylheptane
(4) Rolled a 6 - Added a Chlorine Atom


1,4-dichloro-5,6-dimethylheptane
(changed the end from which the parent chain is numbered)
(changed the end from which the parent chain is numbered)
(5) Rolled a 4 - Added an Isopropyl Group


1,4-dichloro-5-isopropyl-7-methyloctane
(6) Rolled a 4 - Added an Isopropyl Group


3,6-dichloro-7-isopropyl-2,9-dimethyldecane
(7) Rolled a 2 - Added an Ethyl Group


3,6-dichloro-5-ethyl-7-is opropyl-2,9-dimethyldecane
(8) Rolled a 1 - Added a Methyl Group

(converted an isopropyl group to a tert-butyl group)

7-tert-butyl-3,6-dichloro-5-ethyl-2,9-dimethyldecane
(9) Rolled a 3 - Added a Propyl Group


7-tert-butyl-3,6-dichloro-5-ethyl-2,9-dimethyl-6-propyldecane
(10) Rolled a 5 - Added a Halogen


4-bromo-7-tert-butyl-3,6-dichloro-5-ethyl-2,9-dimethyl-6-propyldecane
(11) Rolled a 4 - Added an Isopropyl Group

(changed the end from which the parent chain is numbered)

7-bromo-4-tert-butyl-5,8-dichloro-6-ethyl-3-isopropyl-2,9-dimethyl-5-propyldecane

