The itinerant magnetism of transition metals leads to exchange interaction being significant beyond first neighboring atoms. These longer ranged interactions are in general modified when clusters of magnetic atoms on substrates are considered. Deposition of atoms or clusters of atoms onto substrates causes in some cases quite unexpected results. Examples of complex magnetism in clusters can be found in theoretical studies and measurements using spin-polarized scanning tunneling microscopy that e.g. a Néel state develops in antiferromagnetic monolayers on a triangular lattice. As substrates, the 4d and 5d metals are particularly interesting, partially due to the fact that the spin-orbit coupling is significant, which in conjunction with a low symmetry at the surface causes the Dzyaloshinskii-Moriya interaction to be important. For the reasons mentioned above, we have focused on Cr clusters on a Pd (111) substrate and we report on the electronic structure, magnetic moments and exchange interactions of one- and two-dimensional, using a real-space method based on density functional theory in the local spin density approximation. We find in general that for the investigated clusters, the magnetic moments are sizeable and almost entirely of spin-character. We demonstrate that the interactions in general are dominated by nearest-neighbor antiferromagnetic Heisenberg form, with the $J_{ij}$ strength been fairly similar for both one- and two-dimensional clusters. This implies that Cr on Pd(111) forms an ideal model system, in which clusters of almost any shape and size can be investigated from a Heisenberg Hamiltonian, using a nearest-neighbor exchange model. Both static and dynamic effects of Cr clusters on Pd (111) should hence be possible to investigate with a rather accessible model. We have also found that complex magnetic structures can be realized for linear chains of Cr, due to a competition between exchange interaction and a weaker Dzyaloshinskii-Moriya interaction.